Library University of N C April 27 R

Commerce

# TEXTILE BULLETIN

VOL. 30

CHARLOTTE, N. C., THURSDAY, MARCH 11, 1926

NUMBER 2

## More Different Weaves

Have been successfully produced on the Northrop Loom than on any other Automatic Loom.

You may buy the loom to make print cloth. If you want to run silk filling or make denims or light duck or any other of the many varieties of cloth within the range of that weight of loom, we have the parts to apply and the loom is made to take them. Experiments are not necessary. It has all been worked out.

If this interests you, Let's Talk It Over.

## DRAPER CORPORATION

Southern Office Atlanta Georgia

Hopedale Massachusetts



## Frost Proof Closets

Over 300,000 giving satisfaction. Save water; Require no pit; Simple in the extreme. The most durable water closet made. In service winter and

> Enameled roll flushing rim bowls.

Heavy brass valves.

Strong hardwood seat.

Heavy riveted tank.

Malleable seat castings will not break

> SOLD BY JOBBERS **EVERYWHERE**

Joseph A. Vogel Co.

Wilmington, Del.

## Sale of Navy Surplus and Surveyed Material By Public Auction

NAVY YARD

CHARLESTON, S. C.

10 A. M.

(Eastern Standard Time) 16 MARCH, 1926

THE FOLLOWING MATERIAL WILL BE OFFERED:

Located at the Navy Supply Depot, Brooklyn, N. Y. 100,000 pairs (approx.) Trousers, blue worsted. Located at the Navy Yard, Charleston, S. C. 400,000 pounds (approx.) Ferrous Metals. 49,000 pounds (approx.) Nonferrous Metals. 61,000 pounds (approx.) Railroad Material.

ALSO

Clothing, including 2,600 pairs White Trousers; electrical Material; Boat and Ship Fittings; Gaskets and Packing; Hand Tools and Hardware; Pipe Fittings and Tubing; Boilers and Machinery; Laundry Equipment;

- Motor Dory—20' with engine installed. Waleboats—28'.
- Waleboats—28'.
  Motor Launch—30' with engine.
- Steamer—50'. (hulls).
- 4 Cutters-28'

Also many other items.

The auctioneer for this sale will be Eichberg, Rolfes and Company, 333 Star Building, Washington, D. C.

Catalog No. 603-A contains all available details of description, Terms of Sale, etc., and may be obtained about two weeks prior to the date of sale from the Supply Officer, Navy Yard, Charleston, S. C., or the

CENTRAL SALES OFFICE Navy Yard, Washington, D. C. ESTABLISHED 1815

## Arnold, Hoffman & Co.

NEW YORK, N. Y. PROVIDENCE, R. I. BOSTON, MASS. PHILADELPHIA, PA. CHARLOTTE, N. C.

Importers and Manufacturers of

## Starches, Gums, Dextrine Alizarine Assistant, Soluble Oil, Soap

And Every Known Material from every part of the world for Starching, Softening, Weighting, and Finishing Yarn, Thread or any Fabric

Special attention given by practical men to specialties for Siz-ing, Softening, Finishing and Weighting Cotton, Woolen and Worsted Fabrics; combining the latest European and American methods

Sole Agents For BELLE ALKALI CO., of Belle, W. Va.

Manufacturers of

Liquid Chlorine, Bleaching Powder, Caustic Soda Solid or Flaked

## Puro Sanitary Drinking **Fountains**



Southern Representative

E. S. PLAYER Masonic Building Greenville, S. C.

are in daily use in hundreds of textile mil.

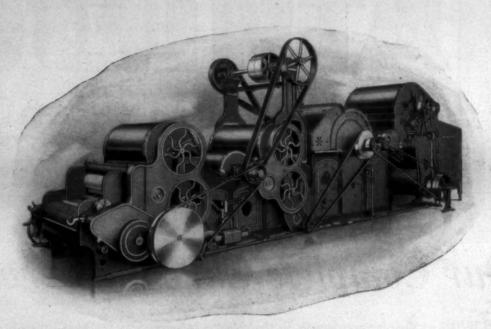
#### WHY?

Because they are the most satisfactory fountain on the market.

Connect a PURO to your supply, then proceed to forget about it. Years later PURO will be just as satisfactory as it was the day you installed it.

Send for Catalog

Puro Sanitary Drinking Fountain Co. HAYDENVILLE, MASS.



Whitin Two Beater Breaker Lapper

This machine consists of a Hopper Feeder with Reserve Box Feeder, an Upstroke 41½-inch Buckley Cylinder with Evener Motion, and an 18 inch-three-bladed Beater Section.

## THIS NEW MACHINE

- (1) Makes a lap sufficiently even to eliminate the use of an intermediate picker.
  - (2) Makes a cleaner and more lustrous lap.
  - (3) Feeds cotton evenly the whole width of itself.

## AT YOUR SERVICE

## WHITIN MACHINE WORKS

Whitinsville, Mass.

Charlotte, N. C.

Atlanta, Ga.

# MITTELSON. Chemicals

## Our Complete Chlorine Service

A DECISION of far-reaching benefit to the chlorine industry was the final ruling of the Interstate Commerce Commission on the Mathieson Multiple-Unit Tank Car.

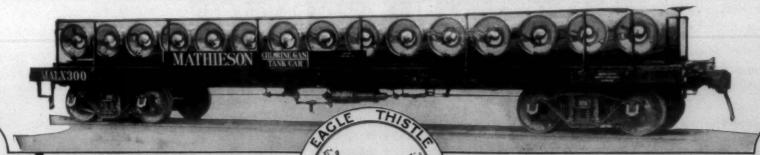
This ruling has placed the Multiple-Unit Car permanently on a tank-car basis and has thus made available to manufacturers of Liquid Chlorine and other liquefied gases a flexible and economical means of maintaining shipping and storage reserves. It will permit the general extension of our practice of accurate weighing and frequent inspection which has proven so advantageous to the consumer; it assures the carriers of two methods of transporting liquefied gases in tank cars which may be expected to increase this traffic; and it has made liquefied chlorine gas available to the consumer in containers of four sizes, according to his requirements.

Today the Mathieson Company owns and operates 120 of the special tank-cars required for transporting Liquid Chlorine, 75 of the multiple-unit type and 45 of the Class V or single-unit type, in addition to its equipment of many thousands of the two sizes of chlorine cylinders.

We thus offer, by reason of the Company's foresight and present resources, a complete service on Liquid Chlorine adapted to the consumer's varying needs and to all conditions of supply and demand.

## The MATHIESON ALKALI WORKS INC. 250 PARK AVE. NEW YORK CITY

PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE



Deal Direct with

the Manufacturer

Caustic Soda Liquid Chlorine Bicarbonate of Soda Anhydrous Ammonia

Soda Ash Bleaching Powder Modified Virginia Soda Agua Ammonia

# TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 18 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 3, 1879.

VOL. 30

CHARLOTTE, N. C., THURSDAY, MARCH 11, 1926

NUMBER 2

## Rayon's Future in Fashion

Address by M. D. C. Crawford before Southern-New England Textile Club.

You, gentlemen, belong to an industry for many years regarded as essential to the welfare and prosperity of the country. Many comfortable, and not a few gigantic fortunes were based on this assumption. You grew, let us say, a little indifferent to the wishes of the public. Style and fashion, color, design and drape, were matters pertinent, perhaps, to the silk industry, but far, far beneath the august consideration of cotton manufacturers.

Unless I have been pleasantly misled, the cotton industry has not been as prosperous recently as might be wished. It is possible that the rayon manufacturers may in time meet with such a situation. It may not be their own fault. They may fall back on the position that their customers should do the educating since the product once it leaves their hands, leaves their control. This is true and such a buck can be passed: it will not effect the general result, however.

I am not concerned in holding the nice balance of justice between these giants of today and their judges. I do say, however, that if the market does not thoroughly understand a product, that product is in great danger of being misused and if it is misused consistently enough, and for a long enough time, the reaction cannot be beneficial. On this rock, I find my firm belief. Remember this, the mill most

Remember this, the mill most likely to misuse rayon is the type of mill with limited equipment but vast productive possibilities, which formerly made staple goods not now in demand, and which has attempted to use rayon as a sort of magic filament to draw them out of the slough of despond.

I hasten to say that the few mills in America in the cotton business, profitably employed are, generally speaking, enthusiastic and consistent users of rayon. But these mills have gone into the problem slowly, and carefully with conscientious attention to each detail and in most cases with full mechanical equipment and with sample rooms almost equivalent to a laboratory. They have tested and retested the use of the fibre: they have selected the proper fibre for each fabric purpose; they have worked sympathetically with dyers and finishers and they have earned and will enjoy

the rewards of manufacturing and

merchandising vision.

I am privileged to quote Floyd Jefferson, vice-president of the Judson Mills, in this connection:

"It is my opinion that rayon in its original conception was intended to be used as an hors d'oeuvre or perhaps we might say as dessert, and there has been a growing tendency on the part of manufacturers, and even consumers, to make a whole meal of it.

"Used as an embellishment or as a decoration employed in combination with cotton, wool or silk, rayon has demonstrated itself beyond the question of a doubt, but I think it is a little too early to say that, as an individual fibre, it has taken its place among the big three: silk, wool and cotton.

"The manufacturers of rayon are frank to admit that they are still experimenting, developing and improving the fibre and eventually, it may reach a point where the consumer will accept an all rayon fabric with the same sense of security that they feel in accepting an all silk, all wool or an all cotton fabric.

"But, in the meantime, it is my opinion that rayon serves its best purpose when used in combination with other fibres.

"There is little doubt that rayon has come to say, and that the rayon fabric is not a passing fad, but we shall probably pass through a period when rayon will be condemned, and the reason for this lies in the fact that too many cotton mills looked upon it as a cure-all when they were at the point of starvation and many manufacturers attempted to use rayon when they had very little idea of the difficulties involved and still less idea as to how rayon could be used effectively to add beauty to their fabrics.

"The Judson Mills was one of the first mills in the South to use rayon in combination with their fine yarns. They have been using it for many years, but the development has been gradual and orderly, and the mill workers have been educated in handling rayon until they have acquired what Walter W. Birge, of the Industrial Rayon Company, calls 'Rayon instinct.'

"Mr. Birge points out that 'progress in handling and weaving rayon comes laboriously with each step carefully thought out, planned and considered, and that it is necessary for cotton mills to develop in their communities a type of worker who can develop rayon consciousness."

"The Judson Mills have always felt that it was best to handle the rayon themselves in each process from skein to yarn, and by installing their own throwing plant, they overceme many of the difficulties which confronted those who depended upon independent throwsters.

"Even in its present state of development, there are in most brands of rayon certain inherent defects which frequently became apparent in the finished cloth. The mills who have made a study of this are able, through careful handling, to minimize to a large degree the troubles which result from the use of these yarns.

"It has been said that in the manufacture of rayon, the chemists still have work ahead of them to overcome three major defects as follows:

"Lack of tensile strength."
"Absence of elasticity."

"Weakness in the wet state."
I call that a very fair and practical statement from a successful user of rayon.

Fully conscious of the great responsibility in speaking to you on such a subject, I wrote to the following gentlemen: L. A. Yerkes, president Dupont Rayon Corp.; S. A. Salvage, the Viscose Co.; Bertram Clark, of Tubize Artificial Silk Co., and Dr. Dreyfus, of the American Cellulose & Chemical Manufacturing Co.

Mr. Salvage very kindly sent me an advance copy of a speech he recently made and as this speech has been published, I will only say that Mr. Salvage dealt in his remarks more with the history and introduction of the fibre than its future. But in his last paragraph, he gives what may well be termed "a warning:"

"Rayon is no longer sitting on the door steps of the homes of the civilized world awaiting entry, but is now firmly established in the family circle, so firmly that it is beyond our power to ignore it or push it aside, and our efforts can only and best be used in seeing that it is directed to channels for the best advantage of the large buying public, and I feel it is the duty of every rayon producer, every fabric manufacturer and every textile distributor to see that the public be acquainted only with the facts and truth in connection with this fibre, as it needs no virtues it does not possess."

Mr. Salvage is in an embarrassing position. He does not wish manufacturers experimenting with this product to discontinue experimenting, even if he thinks they may be wrong. At the same time it is obvious that he feels a misuse or a misrepresentation of its use cannot fail to have a detrimental influence on the future.

Bertram Clark, vice-president of the Tubize Artificial Silk Company, in answer to my question, said: "The product we call rayon today

"The product we call rayon today is already highly various in quality, as in aptitudes. I do not care to prophesize for the future as to the exact form the product will take in the evolution of the next few years. That it will be quite different from what it is now, I firmly believe. The name, rayon, given for convenience and for greater clarity of retail selling, carries with it perhaps the imputation that the product is static.

"We have not increased our productive facilities because we feel a very definite responsibility towards our quality and are giving every aid in our power to our clients to get the best possible results from the fibre. We sell directly to the manufacturers-never through a jobber. We sell only to such manufacturers to whom we would willingly and cheerfully grant the privilege of the use of our trademark. Tubize, in connection with their own as our assurance that they are using the fibre for the purpose for which it is intended and through the methods and processes science and practice alike have endorsed. Only in this way is it possible for us to prevent the misuse of our fibre and we could not exercise this control if we increased our production beyond the market's normal absorption.

(Continued on Page 8)

# Lancashire Cotton Trade During 1925

WRITING a year ago the prospects W of 1925 appeared for Lancashire to be quite rosy. Cotton was be-coming cheaper, the American cotton crop had turned out highly successful in comparison with the previous season, while the closing months of 1924 had witnessed a vigorous demand for British cotton goods. For several years this demand had been a "hole and corner" affair, a filling of bare minimum requirements and a persistent process of hand-to-mouth buying. It was felt that the cheapening of the raw material would restore dence and that spinners of American cotton who had raised their working week from 26¼ to 39¼ hours would not be long before they met a 48-hour demand.

In the event these hopes have been sadly disappointed. The disappointment was veiled during the first quarter of the year because mills were then busy fulfilling orders placed before the close of 1924, but, in actual fact, the decline in demand seemed to set in with the reopening of the market after the Year holiday. Since then there has been no pronounced buying movement. Once more the general has been one of hand-tomouth buying and a long-drawn-out procrastination of demand. India has offered an unsatisfactory market, while the experiences of Mancester traders in China have been calamitous. The British cotton in-dustry has been saved from a definite setback only by the remarkable activity of certain smaller markets. Further, spinners and manufacturers who a year ago were making handsome profits are now on the average losing money on most of the transactions concluded.

The causes of this failure are Each separate market has various. suffered its own difficulties. India has suffered from a continuous scarcity of money, and also, in spite of a succession of good monsoons, from a very slow movement of cot ton goods into consumption. In the meantime Indian mills have gone on producing until the market was glutted with cheap low quality goods, while the import dealers of Bombay and Calcutta, faced with an apparently never-ending depreciation of their stocks, had lost too much money to show any strong desire to enter into new commitments.

For four months during the summer the Marwari dealers in Calcutta were observing, perhaps loosely, a resolution not to make any forward purchases. From time to time during the year, however, there were outbreaks of Calcutta demand for dhooties and light bleached fabrics. Such a demand is, in the ordinary way, the prelude of a wider buying movement, but in each case this year there has been no sequence. It is also an undoubted fact that the trade with India has suffered from the absence of a competitive demand from China. When China starts filling her requirements, the

importer in India is forced to anticipate his requirements in order secure the necessary deliveries, but with the Chinese offtake much below normal, there has been no pressure on deliveries since the first quarter of the year, with the single exception of the active dhootie trade at the end of the

As long as early deliveries have been available for picking up as required the buyer has been in no hurry, and, as other difficulties ac-cumulated, the seasonal demand has often been reduced to a minimum. The forward buying of dhooties in December is an example of the benefits accruing to the manufacturer from a well-sold position.

The aggregate exports of piece goods to India during the year 1925 amounted to 4,434,000,000 square yards as compared with 4,444,000,000 in 1924.

Comparative statistics of competition in the Indian import trade are not yet available for the whole year, but in the twelve months 1,-421,000,000 square yards were exported to India as compared with 1,642,000,000 in 1924. In the eight months ending November, Indian statistics show Great Britain as losing ground in grey, white, and colored goods, while Japan is making progress with grey and colored goods, and the Netherlands with white goods.

In the China trade, the results of the year have been deplorable. Civil war has been incessant, with all the consequent restriction on the internal movement of goods. A new dif-ficulty was encountered in May when the outbreak of anti-foreign riots in Shanghai caused a serious crisis. It resulted in a boycott of British goods in most parts of China and in the suspension of the Shanghai auction sales, which provide a channel for a steady distribution of Lancashire goods. The auctions have remained in suspense during the rest of the year, but it is under-stood that an attempt at resumption will be made early in 1926.

In the meantime the Shanghai boycott has become largely a dead letter and a moderate volume of clearances has been effected by private treaty. Fresh buying in Manchester, however, has been Manchester, however, painfully absent. The boycott of Hong Kong by Canton, on the other hand, has not been lifted although efforts at reconciliation are now being made. The outburst of antiforeign agitation compelled the Treaty Powers to show greater alacrity in fulfilling the promises made to China at the Washington Conference.

A tariff conference has been convened in Peking and the right of China to tariff autonomy has been recognized in principle. conference has been called together to discuss the practicability of China's demand for the abolition of the extra-territorial rights held by foreign residents. If these two changes come into effect the methods of Lancashire trade with China may have to suffer an abrupt modification. During the year the total quantity of Lancashire, piece goods cleared for Chinese ports, including Hong Kong, has amounted to 172,-000,000 square yards, which is 119,-000,000 square yards smaller than the 1924 figure.

It is fortunate for Lancashire that the decline in exports to China and India during the year is to some extent counterbalanced by an improvement in the off-take by the smaller markets of the Far and Middle East. This improvement is so striking that it merits the following tabular illustration:

shown in the following table offer some hope that the opening up of Central Africa by railways and roads will bring some recompense to Lancashire for the loss of trade elsewhere

Trade with Central and South America has been spasmodically The Argentine Republic, Brazil, Chile, Venezuela, Colombia, Bolivia, Uruguay, and Mexico make a better showing than in 1924, and the total export to this market is larger by 67,000,000 square yards. The United States, on the other hand, after an enormous burst of activity in the last quarter of 1924, has been much more cautious dur-

	-Year endin	ng Dec. 31
	1924.	1925.
To	Squa	re vards-
Persia	16,423,900	29,802,300
Dutch East Indies	136,188,200	191,970,500
Philippine Isles and Guam.	15,320,700	12,299,900
Siam	20,353,400	23,993,300
Japan	19,855,400	10,544,000
Iraq	80,498,000	105,942,400
Straits Settlements and Malay States	61,392,300	93,051,700
Ceylon	22,787,500	31,628,400
Total	372 849 400	400 332 500

The total increase in exports to these markets amounts to 127,000,000 square yards, as against a total decrease of 339,000,000 square yards to India and China. The reasons for this contrast are obscure, although the revival of the rubber-growing industry is certainly responsible for a good deal.

In the Near Eastern and North African markets, the actual export figures show an improvement which is to some extent illusory, for the increase is almost entirely the optimistic views taken by buyers towards the close of 1924. The outbreak of rebellion in Syria and the long-drawn-out war in Morocco have provided obvious reasons for caution, but the chief disappoint-ment lies in the Egyptian market. The high prices obtainable for Egyptian cotton seemed to justify some hope of a prosperous season in cotton goods, but as the situation developed it became clear that the goods exported last spring have not yet been absorbed, while the seasonal buying movement which marks the close of the year has this time failed to make any ap-

Tropical Africa, however, provides the pleasing contrast of a market which is steadily recovering its place in the Manchester export trade. The rise in the prices of tropical produce, especially cotton,

ing 1925, the restraint being due largely to the extravagant price of Egyptian cotton which is the chief constituent of goods moving in that direction. The British self-govern-ing Dominions have provided re-sults which, taken in the aggregate, are slightly more satisfactory than in the previous year.

There remains to be considered the European market. In spite of a German demand which received a special impetus from the raising of the tariff on October 1 the total exports to Europe are only fractionally larger than in 1924. The exports to Germany amount to 130,000,000 square yards, as compared with 64,000,000 square yards, a gain which is unfortunately balanced by a serious loss in the exports to Switzerland.

Apart from local difficulties and from the growth of foreign competition, especially from Italy and Japan, the chief blame for the comparative failure of 1925 must be laid to the fluctuations in the price of the raw material. At the beginning of the year the price of middling spot in Liverpool was 131/2d. At the end of the year it was 10%d., which was by no means the lowest price reached in December. With certain intervals of reaction, the tendency of prices has been downwards throughout the year. The most welcome increase in

	Square	vards
Exports to	1924.	1925.
Foreign West Africa Foreign East Africa British West Africa British East Africa	60,865,400 7,263,100 84,481,100 16,492,400	84,032,200 7,071,600 152,315,700 25,481,900
Total	169,102,000	268 904 400

has inspired an active demand for cotton goods and the export has been limited only by the difficulty of moving any larger quantity into the interior. The actual figures

American supplies has made cotton cheap, but the fruits of this cheapness still remain to be gathered. The actual size of the American (Continued on Page 27)

## Ponsol Red Violet RRNX Paste

THIS latest addition to the Ponsol series, even in the palest of shades, possesses excellent dyeing and fastness properties. As a vat violet it is of particular interest, inasmuch as it is unaffected by either heat or moisture.

Ready solubility, coupled with highly satisfactory penetration and level dyeing properties permits its use on all types of machines.

Ponsol Red Violet RRNX Paste is used to a considerable extent as a shading color of light pinks and mode shades.

## E. I. DU PONT DE NEMOURS & CO., Inc.

Dyestuffs Department

WILMINGTON

**DELAWARE** 

#### Rayon's Future in Fashion

(Continued from Page 5)

I am indebted to L. A. Yerkes for a most complete and interesting general survey of my subject and regret that I have not the time to read his report in full since I realize excerpts do not always convey the full meaning. He said in part: "Silk is an important competitor of cot-The value of cotton goods produced during 1923 was 2,000 millions, a decrease of 200 millions the production of 1919. Silk goods have shown an increase from 680 to 760 millions for the same Silk products were period. attractive and people bought them irrespectively of their higher prices. Fortunately, for cotton mills, wo-men may have silk tastes but not pocketbooks to gratify them. We see that the production of broad silk remained stationary during the four years' period, while the goods made from silk mixtures jumped from 69 millions to 123 millions. People were buying rayon which at lower prices gave them the satisfaction of silk.

"By using rayon in their products, cotton mills are able to produce attractive goods at prices suitable to the multitude which seeks them. They are already doing it with great success. We see an increase of 176 per cent in four years in the goods made of cotton mixed with silk and rayon. The good old ginghams have bettered themselves during that time only by 18 per cent. The use of rayon by cotton mills expanded from 1,210,000 pounds in 1919 to 13,000,000 pounds in 1925.

"The only limit to this expansion is in the quality of goods turned out by cotton mills. By trying to make not the best but the cheapest products, they may kill the goose that lays the golden eggs. If the market is flooded by unsatisfactory rayon products, even the goods of good qualities may be hard to sell.

"There are other qualities besides the beauty for which people buy well made rayon goods. The romance of this man-made fibre competing with the ones made by nature appeals to many. Rayon is durable. It is fast to light and washing. Its luster is permanent. It is not affected by perspiration and does not turn yellow with age. Its smooth surface makes it resistant to friction. Water has no permanent effect on it, if it is handled gently while wet. Rayon goods will withstand the wear given to an average cotton fabric of the same goods.

"The hygenic qualities of rayon undergarments contribute to preservation of health, personal comfort and cleanliness. Rayon absorbs perspiration, allowing the pores of the skin to breathe. Rayon goods are never weighted with metallic salts detrimental to the skin. The smooth surface of rayon gathers less dirt than do the other fibres." Because of the chemical differ-

ence, Celanese seems almost distinct from the general rayon problems. It has its own peculiar advantages and disadvantages. The lack of sympathy for the dyestuff of other fibres, resistance to moisture count for or against it, as the case may be. Certainly there are a great many instances where Celanese cannot substitute for other fibres and, vice versa, where its use is desirable. In instances nothing else can some take its place, particularly in its ability to join with any or all other fibres and produce contrast in a single dye bath, there is much to commend it to all designers seeking effective and reasonable patterning. Its greater tensile strength when wet is also strongly in its favor for many purposes. Its cost, however, and the fact that it demands special dyes and careful treatment has somewhat restricted its use and freed it in a measure from the problems that now face the other fibre.

At the same time, if other fibres are misused for a sufficiently long time, and meet with vigorous disapproval, the virtues of Celanese will not save it from the general distaste toward synthetic fibres.

All of the arguments I have used, or suggestions I have made, are not against the use, but against the over and misuse of rayon. We have before us an example of what indifference to style value can do for the cotton industry. But we have also before us the history of the cotton fibre, immediately after the introduction of the Whitney cotton gin in 1793. The use of cotton spread with startling rapidity, gradually entering into every channel of the textile industry, until it almost completely supplanted silk and flax and wool in many fields.

Perhaps, rayon is going to have a similar history. After certain obvious defects are corrected through chemical skill, aided by research, it is conceivable that the synthetic fibre might go a long ways towards supplanting its parent. And even under the most drastic public reaction, it will hold its place when used with judgment, and as a decorative element with other fibres. Its greatest permanent development may be in the field of decorative fabric rather than apparel. course, in this connection I am speaking relatively and not poundage. But, whoever uses this fibre should remember that its value consists in its ability to make fabrics more desirable through beauty and it should be used to the extent in which it serves its purpose and not as Mr. Salvage himself says

"as a substitute for silk or wool or cotton," but as an additional and separate entity serving its own purpose and carrying out its own mission.

I believe that rayon to a certain extent has aroused the imagination of fabric mills to new possibilities of design and decoration in fabrics. So far as rayon serves this purpose, in so far as its physical limitations do not debar it from development along these lines, it will increase its use and be a constructive factor in history, But the problem goes much deeper than any one fibre or group of fibres. It goes much deeper than the type of fabric desirable in any one season or year.

It has become fashionable of late to speak of diversification as a saving virtue. Diversification of itself alone, not based on sober reason and on intelligent research, is infinitely more dangerous than gambling in the raw cotton market. It is obvious that the public have taken a distaste to many old forms. They insist that color, design and texture be created for their comfort and enjoyment rather than to fit the indifference, convenience or incapacity of mill men.

As a matter of fact, as great difficulties have arisen through diversification without reason as through standardization without intelligence. There are far too many designs produced simply on the plea of their novelty value. This age is clotted up with meaningless things in all areas of expression.

Seriously, I believe that with a proper understanding of design, a full comprehension of its seriousness; and some appreciation of the obligation a mill has to its community and age, that the number of designs, textures, and "Styles" will be reduced rather than increased;

(Continued on Page 27)

## VICTOR MILL STARCH - The Weaver's Friend



It boils thin, penetrates the warps and carries the weight into cloth. It means good running work, satisfied help and one hundred per cent production.

We are in a position now to offer prompt shipments.

## THE KEEVER STARCH COMPANY

COLUMBUS, OHIO

DANIEL H. WALLACE, Southern Agent, Greenville, S. C.

C. B. ILER, Greenville, S. C.

L. J. CASTILE, Chart tte, N. C.

# ANNOUNCING

The Enlargement of the Gastonia Brush Co.

#### ATTENTION

#### COTTON MILL MEN OF THE SOUTH

This plant was established more than a year ago, but within the past few months has been entirely reorganized and is now operating at full capacity, equipped with the LATEST AUTOMATIC MACHINERY; the most APPROVED PATTERNS AND DESIGNS, the most SCIENTIFIC METHODS, using the BEST GRADE OF MATERIALS which can be bought anywhere.

There are many minor refinements and improvements in our Brushes not found in others. Our Brushes have wonderful resiliency, giving them long life, fine service, and low maintenance cost.

And, the real saving comes about, by reason of the fact that mills can now buy Brushes in small lots at big-lot prices.

We confine our efforts exclusively to the manufacture of Cotton Mill Brushes, and solicit your patronage. All Southerners, and in fact all good Americans, are preaching the doctrine of keeping your money at home by patronizing home industries. We are a One Hundred Per Cent "Home Industry."

Patronize Home Industries-including the Gastonia Brush Company

# Gastonia Brush Company

Gastonia, N. C.

Factory Corner Second Ave. and Linwood St.

## Reclaiming Stained Cotton

(By Texteelia

A LARGE part of every cotton crop comes on the market as stained on tinged cotton. This cotdition is caused by the cotton remaining too long in the field after the bolls have opened. The discoloration as manifested is due to the coating and partial impregnation of the fibres by dirt, dust and earth minerals natural to the particular locality from which the cotton comes.

From all sources come reports of an unusual amount of stained cotton in the 1925 crop. This fact, and the fact that the difference in cost per pound between white cotton and stained cotton of the same staple is about 7 cents, should prove of general interest to all spinners.

Not that they will necessarily be interested in spinning stained cotton but that, for a cost not exceeding 2 cents per pound, the stained cotton can be reclaimed from its stained condition and made into a white cotton exceeding in cleanliness and absence of color the best quality of natural white cotton. No loss of spinning quality or breaking strength will occur and the net profit derived will be several cents per pound. With a cotton goods market yielding the very minimum of profit, as is the present condition, the reclaim-

ing and using of the lower priced stained cotton is of decided advantage.

The equipment necessary for carconsists of one special type vacuum type dyeing and bleaching machine, one 40 or 48-inch hydro-extractor, one raw stock dryer and the necessary power and steam to operate these machines. With such a layout a production of reclaiming cotton amounting to 2,000 to 3,000 pounds per day can be obtained very easily. In the event a greater production is wanted it is, of course, necessary to put in additional vacuum machines. The modern raw stock dryer is so constructed that it may be enlarged by adding sections of from six to twelve feet in length and a 48-inch hydro-extractor has a capacity of about 5,-000 per day of 10 hours.

The steam necessary to dry the cotion and to operate one vacuum machine is not over 25 boiler horse-power. And the cost of the equipment exclusive of the boiler is between seven and eight thousand dollars. The writer estimates that, at a conservative figure, the plant should easily pay for itself within six to eight months.

Another fact to be given consideration is, that the above plant is

just as capable of turning out 2,000 to 3,000 pounds of dyed cotton as it is of producing that quantity of reclaimed cotton.

The best process in use today for reclaiming the tinged or stained cotton is as follows:

Load the machine with 800 to 900 pounds of cotton, distribute material evenly, and bolt down the top covering plate.

Fill the machine with cold water and start the circulating pump—then add 1 per cent of any good sulfonated oil and 2 per cent soda ash (previously dissolved in hot water).

Let the circulation continue for 10 minutes.

Then, through a tapped and threaded hole on the suction side of the pump, feed in chlorine gas to the amount of about 2 per cent.

This is done by connecting a lead or heavy rubber hose to the chlorine cylinder and to the tapped hole. The cylinder of liquid chlorine is set on platform scales and the weight on the beam moved so as to cause the scales to balance when the 2 per cent of gas has been admitted to the machines.

When the required amount of gas is in the machine the gas valve is closed and the pump on the dyeing machine is allowed to continue its work for 30 to 45 minutes.

At the end of this period (which must be determined by experiment at each plant) the bleaching bath or solution is run to the sewer and the machine is refilled with clear fresh water. This water is known as the 1st rinse and should be circulated for 15 to 20 minutes before running it to the sewer. Then refill with fresh water and add 10 per cent of hydrochloric acid (previously diluted in three or four buckets of water). Let this acid or "sour" solution circulate for 15 to 20 minutes and then run to sewer.

Refill machine—starting circulat-

Refill machine—starting circulating and add ½ of 1 per cent soda ash (previously dissolved). Also add 1 per cent of a good softening or finishing oil. Heat the bath to about 120° F. and circulate for 20 minutes. This softening bath puts the cotton in a good soft, pliable condition, and after drying, leaves it in a good spinning condition as it was prior to the reclaiming process.

was prior to the reclaiming process.

When the softening bath has been circulated for about 20 minutes it is run to the sewer. The batch of cotton is then lifted from the machine by the regular overhead hoisting device, and dumped near the

(Continued on Page 22)

## H. & B. AMERICAN MACHINE CO.

Pawtucket, R. I.

Builders of Complete Equipments of

## Cotton Opening and Spinning Machinery

Consisting of

HOPPER BALE OPENERS — CRIGHTON OPENERS — EXHAUST OPENERS BUCKLEY OPENERS — ROVING WASTE OPENERS

SELF FEEDING OPENERS — FEEDERS — COTTON CONVEYING SYSTEMS INTERMEDIATE and FINISHER LAPPERS

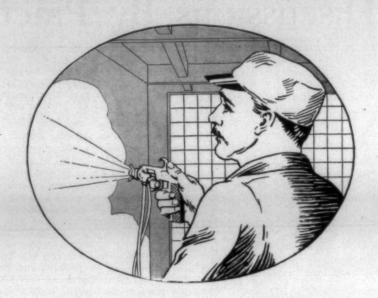
REVOLVING FLAT CARDS — DRAWING FRAMES (With Mechanical or Electric Stop

SLUBBING — INTERMEDIATE - ROVING FRAMES
SPINNING FRAMES and TWISTERS (Band or Tape Driven)
SPINDLES — FLYERS — RINGS — FLUTED ROLLS

Southern Office

814-816 ATLANTA TRUST CO. BLDG.

Atlanta, Georgia



# Put Aluminum Paint on Mill Walls and Ceilings

PROFITS increase when you paint mill-interiors with Aluminum Paint.

Aluminum Painted mill-walls and ceilings reflect a soft, bright working light that decreases operatives' fatigue and increases their production.

Aluminum Painted interiors save you money, too.

Measure up these Aluminum Paint advantages against your experience with ordinary wall-paints:

One-coat completion — Aluminum Paint completely hides the original surface color with a single coat.

Lasting reflectivity—This one coat keeps its luster. Aluminum Paint is difficult to darken. Even dye-house fumes have little effect upon its luster.

Washability — The economy of Aluminum Paint is furthered by the fact that dirt and dust may be washed from its surface without reducing its reflectivity.

Coverage—Aluminum Paint covers 500 to 700 square feet of surface per gallon.

Low Cost—Aluminum Paint costs no more than less efficient wall paints. It lasts longer in service.

These economies are due, in a large measure, to a new principle introduced by Aluminum Paint—"leafing".

The story of "leafing" and the many ways it enables Aluminum Paint to serve you is interestingly told in our new illustrated booklet — "Aluminum Paint —A Step Ahead in Industrial Painting". Write for a copy today.

## Aluminum Paint

Aluminum Company of America 2423 Oliver Building, Pittsburgh, Pa.

Offices in Seventeen Principal American Cities



ALUMINUM IN EVERY COMMERCIAL FORM

## Practical Discussions By Practical Men

#### Mixing Numbers.

Editor:

Will be glad to see suggestions on your Discussion Page for keeping the numbers from being mixed in the winding in mill making hosiery yarn. Manager.

#### Filling Twist.

Editor:

How hard can filling yarn be twisted and be woven without kinking?

#### Yarn Strength Tester.

What is the difference between a yarn strength breaking machine, and a weighing scale. That is what is the principle or theory of one of these machines. Dunno.

#### Labor Tunrover.

Editor:

I have been reading the "Practical Discussions" in the Bulletin and I find them very helpful. And now want to ask you to please enter the following question:

How to figure per cent of "Labor urnover." I have seen it figured Turnover." different ways, but I want the correct method. Phil.

#### Effect of Twist on Cloth.

Editor:

Would like some advice as to how varying effects caused by twist on the face of fabrics? Asl notice this art does not seem to have been developed very much, and that possibly over 95 per cent of the cotton goods woven, is done with regular left hand twisted yarns. I am wandering why twisting effects are not more fully developed in our textile mills. If you care to have this matter threshed out in your columns I would be glad to hear from those who are posted on it.

#### Answer to Young Weaver.

Editor:

In answer to Young Weaver, relative to weaving cloth wider than the width of the loom, will say that this can be easily done and cloth be woven, double or triple width, or as much wider as there is room to mount harnesses. It is necessary to employ a dobby head to weave more than double width. As many widths can be woven as there is room to draw-in ends sufficient to make decent cloth. It takes two sets of harnesses for each width or layer of cloth be woven. That is, it will take for harnesses for weaving double width, and six harnesses for triple width and so on.

The Practical Discussion Department of the Southern Textile Bulletin is open to all readers whether they are interested in seeking information on technical questions or are willing to help "the other fellow" who has experienced trouble in some phase of his work.

The questions and answers are from practical men and have often proved extremely valuable in giving help when it was urgently needed.

The interchange of ideas between superintendents and overseers develops a great deal of worth while information that results in much practical benefit to the men who are concerned with similar problems.

You are invited to make free use of this department and to join in discussing various problems that are mentioned from week to week. Do not hesitate because you do not feel that you are an experienced writer. We will take care of that part of it.-Editor.

Cloth can also be woven one and one-half the width, also two and one-half the width, etc.

One large mill in the South was the first to weave cloth in this way on a large scale. And this mill wove the cloth seven (7) yards wide on a

yard wide loom.

This cloth was used for tobacco cloths and it was a success.

Information.

#### Answer to Young Weaver.

answer to Young Weaver's question as to the possible width that cloth can be woven upon a loom, will say that plain cloth can be woven twice the width that the loom was built to weave. This can be done upon a four-cam loom. Draw the warp straight ,4-3-2-1, and play the harness as follows: 4 up, -1 down, 4-3-2 up and 1 down, 4-3-1 up, 2down, 3 up, 4-2-1 down and if you were weaving 40-inch cloth before you changed, you ought to have 2 picks of a cloth 80 inches

#### Answer to Fixer.

Ediotr:

In answer to Fixer, there is a good reason for the last end beaten up not staying put in place until more ends are beaten against it.

In the first place, there is nothing to hold the end in place until another pick is beaten against There is an interval between the beating up motion, and the shedding movement when the last pick is laying in an open shed with nothing to hold it agains the previous pick. In fact the previous pick also rebels on account of the pressure compression behind it. An if the process of the shedding and the beating up of a loom is carefully watched, it will be noticed that a piece of yarn does not reach its home base until the lay has beaten up three or four picks against it, so that the compression behind may be overcome by the compression in front of the pick.

When a pick has been beaten home, the lay backs out, and in order that the shuttle may cross the warp safely, the shed must remain

sufficiently open for it to pass. This leaves nothing to prevent the last from becoming loose and falling toward the lay a bit until it is checked back by the shedding motion which crosses the ends in front This is a very interesting point in weaving. Because, in reality, the lay does not technically beat up the pick directly to stay home at all with the first beating. after the lay has beaten the fourth pick, or so that the first pick is driven home to stay, and instead of the lay having beaten the pick home by direct contact with pick number one, it is beaten home by the proxies of the lay in second, third and fourth picks. This point in the weaving of cloth is not generally This point in the known, but it is true that the beating up of a pick into its final home base, is done by proxy.

Charleston.

#### Answer to Twist.

Editor:

Answering the question asked by What puts the twist in yarn. The traveler or the spindle? Would say that I think the spindle puts the twist in, but it does not put in as much as it would if it had no traveler to contend with.

We will look at a mule for a moment. There the yarn goes direct to the top of the spindles. While the spindles are reeling from the roller beam just as fast as the sliver is being delivered by the roll, less loss by contraction. Now here we have full twist as figured in the machine. Then the folders change, and the roll stands still while the yarn is being taken up by the spindles. But on the spinning frame, it is impossible to run the yarn direct from the roll to the top of the spin-Why? Because we cannot keep the slack out of the yarn. We can take an end out of the traveler and let it run and the spindle will put twist in the yarn allright until the yarn tangles up and breaks down some more ends. But, and heres the point. It will not keep the slack out of the yarn and lay it on the

So we find that the little traveler does the work of two things on a mule. And one thing it enables us to do on a spinning frame that we

cannot do on a mule, and that is to run the front roll all of the time from one set to the other. the front roll runs half time and the spindles run half time to make the yarn, and the folders work half time to lay the yarn on

On the spinning frame the traveler takes the place of the carriage. The folders, and bridges the half-time stop of the front roll. But we loose some twist, and we call it loss of twist in spinning. The frame will not put in what we figure it will when we figure from the roll to the So we figure the loss in spinning. Divide one by the circum-ference of the bobbin take an empty filling about one and a half inches around 1÷1.5=.67 full bobbin about three inches around

1÷3=33. 67+33=100÷2=.50 or an average of one-half turn per inch for the set. The spindle puts the twist in, but the traveler, the size of the bobbin, the traverse of the ring rail stops the spindle from putting the full twist in.

Loss Of Twist.

#### Answer to Young Weaver.

In answer to Young Weaver's question on thin places, I have seen several replies that I do not think will be of much value to him. First, he should see that his loom fixers get on the job. Second, he should see that loom fixers keep set screw well tightened in lower part of sword leg, that is keep sword leg tightened to rocker shaft. Third, he should see that the sand rolls work freely and are kept well oiled Fouth, he should see that the takeup gears are kept oiled and work Fifth, he should see that freely. Fifth, he should see that when the loom goes to make change that it takes in a new bobbin. should also see that the take-up gears let back as they should.

I will be glad to answer any other question I can about Draper looms. I am an ex-Draper man, but am fix-ing looms now. Ex-Draper Man. ing looms now.

#### Answer to Twist.

Editor:

In answer to Twist, I would like to say that I do not believe that anybody knows just exactly what puts the twist in the yarn as this question has been argued for years and still it hasn't been settled. According to my opinion it will never be a known fact. I have an argument in mind that I would like to put up and if anyone can show me more facts on their side of the question, then I will change my idea.

It is a known fact that there is a variation in the turns per inch the yarn on a bobbin that s practically empty and a bobbin that is full of yarn. By actual tests this variation will show from 12 per

cent to 1.5 per cent less twist in yarn taken from the outside layers of a full bobbin of yarn and that taken from the first two or three layers of an empty bobbin. According to my argument it is the drag of the traveler that puts the twist in the yarn and the basis of my argument lies in the fact that with a two inch ring and a warp bobbin that measures 14-16 inches in diameter there is a space of 9-16 inches between the outside of the bobbin and the inside edge of the ring and when the bobbin is empty the yaru is pulled from the traveler to the bobbin at almost an 80 degree angle. causing the traveler to drag very much heavier against the ring than when the bobbin is full and within 1-16 of an inch to the edge of the ring where there would be only about a 45 degree drag on the trav-"Willing"

#### Answer to Twister.

Editor:

While it would seem best to draw several ends to be twisted, through separate eyes or guide wires, and have them enter the bite of the twister rolls in orderly manner and straight like a tape, it has been found by practical experience that, strange as it may seem to the man of method, the operation of twisting is performed much better when the ends are delivered to the bite of the twisting frame rolls, through a single eye. The ends thus delivered to the rolls will mesh and fit themselves into closer companionship with one another better. To prove this, and at the same time to show the reason why, if "Twister" will take a piece of ordinary tape and twist a yard of it by hand he will have the twist awards in the same have the twist running into curls instead of a close fitting twist. Now, if the ends in this tape were separated and allowed to find their own bearing, they will fall each one into their own best home run. There is another reason for this. There is no such a thing as a perfectly even yarn, nor an evenly twisted yarn. Therefore the thick and thin places, the hard and soft twisted places. the stronger and the weaker places assemble themselves and find there own level bed better when shifting for themselves, than when fed into the bite of the roll side by side in tape fashion. Try it and see for vourself. Chaos.

## Pacific Mills Applies Science to Textiles

In view of current feeling that the managers of textile enterprises are so bound by tradition that they are not progressive either in manufacturing or in merchandising in a way at all comparable with other industries, it is refreshing to hear of one organization whose foresight is bearing fruit.

hearing fruit.

The Pacific Mills, one of the largest cotton textile manufacturers in the world, has been conducting research for a number of years. This research has taken the form of scientific examination into the selection and processing of the cotton fibre. The Cotton Research Co, was

organized in 1919 and there was established in Boston what amounts to a miniature cotton mill supplemented by chemical, physical, and photographic laboratories. In this little plant and in the mills, tests were run under scientific observation, and the methods developed were later fried in the mills.

Cotton from the various sections of the country was tested as the crop came in and methods not elsewhere in use have been developed for measuring the various characteristics of the cotton fiber.

Representatives of this organization and research men employed in the mills themselves are constantly at work observing and studying operations in the various plants of the company. Very seldom, however, is it possible to tie the results of research work so closely to the improved character of the product as it is possible here to indicate how this work done by the Pacific Mills becomes of definite interest to everybody who wears textiles. As the job is now arranged, the weaver's only work outside of starting the machine in the morning, stopping it at noon, starting it after the lunch hour, and stopping it at night, comes when a thread breaks which it is his duty to tie up. From this plain fact it is quite apparent that the road to increase in the number of looms that a weaver may tend, and therefore to decrease in the cost per loom for the weaver's wage, is through fewer braking threads per loom. This also applies to other machines in the yarn preparation and spinning pro-

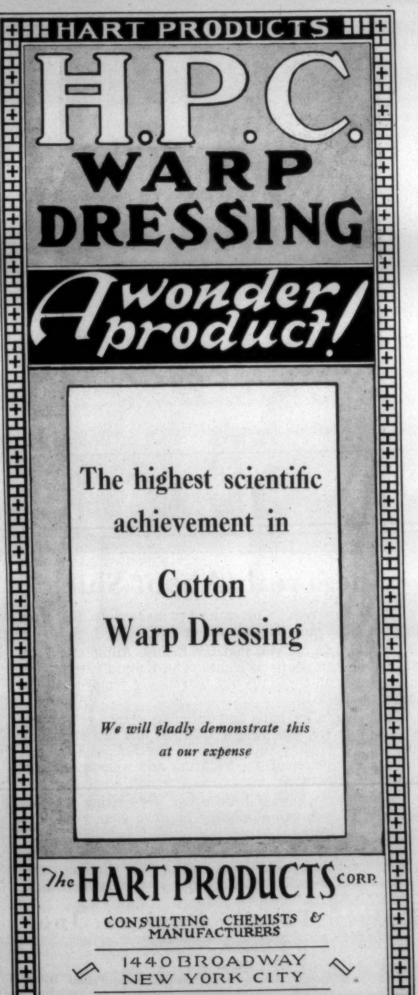
With this central idea as the foundation for its investigation, the Pacific Mills discovered that by careful scientific investigation of the scores of points where yarn is or may be weakened, or the cotton fibre maltreated, it was possible greatly to improve the running of the work and greatly decrease the breaking of the thread, sliver or roving, according to the process. Through this type of work the company has been able to reduce the direct labor cost per loom by about 45 per cent and still pay the weavers more. It has been able to make similar savings on other operations with similar satisfactory results for the operatives.

It is obvious that these refinements which reduce costs each point in the process produce a more perfect warp and filling thread in the cloth and, accordingly, must mean greater strength, longer wear, and evener, neater appearance. Pacific Mills, therefore, is being repaid in a two-fold way—by lower costs and improved products—for its foresight of several years ago.—Boston News Bureau.

## World's Cotton Stocks 10,364,000 Bales.

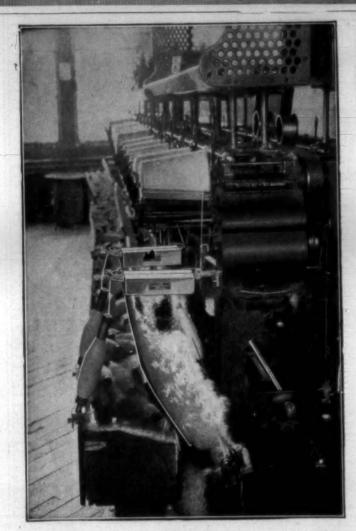
Washington, March 4. — World cotton stocks, as of July 3t, 1926, were estimated by the Department of Agriculture today to be 10,364,000 bales.

This figure is based on the world's carryover as of July 31, 1925, of 6,-114,000 bales; production, 27,600,00 bales, and world's consumption, 192, and 1926, of 23,500,000 bales.



PRODUCTS

## Bleaching Artificial Silk



## The Truth About Slubs

It does not require inventions to make slubs, but often they are made, and that is another story.

We wish to tell you that the Eclipse Automatic Yarn Cleaner is sure death to slubs. The Eclipse Cleaner not only catches all the slubs but thoroughly removes all the dirt in the yarn.

Many knitting mills and spinning plants realize the extreme value of the Eclipse Cleaner, and are equipping their entire winding capacity with the Eclipse Cleaners. The basic principle of good knittng and weavng is thoroughly clean yarn.

Why make yourself believe you are getting the best results when you can absolutely improve your yarn with the Eclipse Cleaner.

The Eclipse Cleaner is easily attached to your winder. It does not add any additional cost to your winding costs. Upon request we will cheerfully give you a demonstration.

## Eclipse Textile Devices, Inc.

Elmira, N. Y.

Automatic Yarn Cleaner, Automatic Stop Motion, Yarn Tension Device Eclipse Van Ness Dyeing Machine

Today we see the manufacture of this new fibre in position of great importance, and in the processing of it for the production of new textile fabrics and materials, like all other manufactures of any note, there is necessarily a certain amount of wasteage accrues in the various processes through which the material passes. The gathering together of this wastage is now an important industry in itself, and the working up of this waste has become a successful commercial proposition. The main sources of waste are in the manufacture of the silk and in the spinning and weaving, and whilst profits may be good in the relatively new industry, yet to be economically of greater value the waste is now carefully considered and marketed.

In a recent issue of the Deutsche Faeber Zeitung atention has been drawn to the bleaching of this waste product of artificial silk manufacture, and the author, W. Kosche, points out that the process which is used for working-up was that silk depends on the character of the waste itself, i.e., whether it has been already through finishing processes or not. If it has, all impurities with which it has become contaminated must be removed. Bleaching then follows.

The waste may vary in several ways, according to the method of manufacture, the finish which has been given to it, and the different kinds of impurities which may be found in it, such as machine oil, grease, dirt, etc.

Four Kinds of Waste.

There are four main classes into which the waste is divided:

1. All waste silk from the manufacturers, except,

Which is waste viscose silk.
 Waste from the processing of spinning and weaving, and

4. Waste sweeping and similar dirty varieties of the spinning and weaving establishments.

Processing.

In preparing for the bleaching of the waste material there are three main operations—the premlinary treatment, the bleaching proper, and the after-treatment.

In the first operation the silk is first disintegrated and the dust and dirt and other foreign impurities removed and the fibres left in a loosely held condition. These are then put into a kier which is given about half the quantity of silk waste to hold, which it would be expected to contain if it were filled with cotton. The amount which the kier is given is just so much as not to be tightly packed. The top of the material is then covered with a cover so as to allow a certain amount of pressure to be given to it.

pressure to be given to it.

The waste is then treated with a solution of 1½ sodium perborate, and a 1 per cent commercial sodium hydrate, or a solution of 1½ per cent sodium silicate, at 60 degrees Cent., for two hours, the last half-hour the temperature being raised a further 10 degrees, in order to use the last traces of oxygen in the liquor.

Throughout the operation it should be noted that the waste may deteriorate by being too long in contact with water, most of these types of artificial silk possessing the unfortunate property of suffering a weakness effect under the influence of water and wetting generally.

#### Bleaching Operations.

For the bleaching process proper sodium hypochlorite is probably the compound most serviceable and easy to employ, and a solution is employ, and a solution is employed at normal temperature, and containing about 21/2 grams per litre of available chlorine. The author of the paper in the above journal mentions eight to ten hours as the duration of treatment in this solution, but this time is probably too long, and several hours less time may be found to give the required bleach without the risk of weakening of the material which too prolonged a treatment may involve. After the hypochlorite the material is washed thoroughly with water, then scoured and treated for half an hour with a weak solution of hydro-chloric acid. A very thorough wash is then given to remove entirely all traces of acid.

In another vessel the material is then treated with a warm solution of soap, or in some cases three good washes-off with water are given, then whizzed and dried carefully at 45 to 50 degrees Cent.

#### Viscose Waste.

In the case of viscose silk waste the author recommends treatment with the reducing types of bleaches such as bisulphite and hydrosulphites, decroline, blankit, etc., instead of the hypochlorites, in order to remove the sulphur content of the material, which is always liable to contain some. A 3 per cent bisulphite or 1 per cent hydrosulphite solution for a period of two hours at a temperature of 90 degrees Cent. is stated. The silk is then washed with water, bleached, scoured, and then washed again. There is liability of rust stains making their appearance, due to the nature of the waste, and this is removed by treatment of the material in a solution of oxalic acid, followed by a wash-off with water again.

with water again.

Viscose silk waste usually requires brightening process, consisting of a warm oxalic acid solution (40 degrees Cent.), 2½ to 3 per cent olive oil, 3 to 5 per cent gelatine, and from 7 to 8 per cent acetic acid, for twenty minutes. The material is then whizzed and dried without any previous or further wash-off.

#### Spinning and Weaving Waste.

In treating the third type of artificial silk waste we have to deal with a mixture of already bleached and raw silk, and there may also be colored material present. Some of this color may be removed in the bleaching, which is usually shorter than the one already outlined, say three to six hours, according to the bleaching which the fibres may have already undergone. Two to 2½ grams available chlorine will prob-(Continued on Page 23)





Constructive Criticism

by Chas. E. Carpenter.

Near Editor of

The HOUGHTON LINE.

don't like a top hat.

I always feel like a fool in one and I am certain that I look like one.

Beyond that I have nothing against a top hat, or those who want to wear them. Old English prints show cricketers playing in top hats, as well as those engaging in other sports. But I have always thought that this was some sort of a display of superiority on the part of the English like unto the trapezist, who performs in evening clothes. They wore top hats not because they were best, but rather because it was most difficult to do anything best with a top hat on.

There are, of course, some folks who must observe the conventionalities of life and wear top hats on certain occasions. Even Roosevelt has been seen in a top hat, but most of his photographs, particularly those which are most popular, do not decorate "Teddy" with a top sky-piece.

Because there are real folks who must wear top hats, there are a lot of four-flushers and shortskates who wear top hats, just to try to make folks believe that they are the real folks.

And as it is with top hats, so it is in all businesses. Some businesses, by virtue of their success, are compelled to do things which they do not prefer to do any more than I prefer to wear a top hat. But those things are penalties of success. Taking advantage of this fact the four-flusher and pretender come along and do the very same things, although there is no necessity whatsoever to do them.

One of the things which success in business does is to prevent the head of the concern from coming in such intimate contact with the trade, as was the custom when the concern was less successful and smaller.

With a view of partially overcoming this undesirable feature of big business, I personally, as head of our Company, write these messages to the trade, conveying most of them through the medium of a little periodical publication, known as The HOUGHTON LINE, every word of which I write myself.

I can be a little more frank in *The LINE* than in these pages, because *The LINE* is my own medium. And naturally I do not want to criticize others too plainly in publications owned by our friends.

The HOUGHTON LINE may be yours for the asking; all you have to do is fill out and mail the following blank to:

DEPARTMENT OF PUBLICITY, E. F. HOUGHTON & CO., Box 6913, North Philadelphia, Pa.

Gentlemen

Please put my name on the mailing list for The HOUGHTON LINE.

Name		
Street		
City	State	
Position		
Mill		
Kind of goods made		

## E. F. HOUGHTON & COMPANY

P. O. Box 6913, North Philadelphia, Pa.

Distributors Located At

ATLANTA, GA. 1015 Healey Building Phone: Walnut 4807 GREENSBORO, N. C. P. O. Box 663 Phone: Greensboro 1999 GREENVILLE, S. C. 511 Masonic Temple Phone: Greenville 2316

ST. LOUIS, MO. 418 N. Third St. Garfield 3559

AND ALL OVER THE WORLD

Oils and Leathers for the Textile Industry





# Nopcov

## For Better Finishing

NOPCOV is used to great advantage in the finishing of piece goods, in place of ordinary sulphonated oils, turkey red oils, etc. Not over half the quantity of NOPCOV should be used as would be required of a 75 per cent turkey red oil.

The use of NOPCOV in finishing results in a very much finer, softer feel to the goods, better lustre, entire absence of odor, and a freedom from any tackiness such as is often encountered with turkey red oils or other oils made from castor oil base which are always, by nature, more or less sticky.

On account of the small quantities of NOPCOV required to produce definite effects and the superior results produced, this oil falls into a class by itself from both a quality and price standpoint.

"Nopco Products Produce"

## National Oil Products Co.

Main Office:

HARRISON, N. J.

District Offices:

CHICAGO

CHARLOTTE 204 Johnston Bldg. BOSTON

#### Cotton Mill Processes

#### and Calculations

By D. A. Tompkins.

Copy Revised for Third Edition.

(Continued from Feb. 25th)

General Data.

297. A common sheeting loom is about 42 inches wide from breast beam to whip roll. A 40-inch loom is about 54 inches long and 30 inches high to top of breast beam. The lay is about 7 feet long.

For a 40-inch loom running 165 picks per minute the usual allowance is about 1/4 horse power for driving.

The driving pulleys are about 12 x 2, tight and loose, but may be had any size from 8 to 20 inches. They may have a clutch pulley instead of tight and loose pulleys.

This loom weighs about 1,000 pounds.

Looms for producing the many varieties of cloth vary so much in detail of construction that it is not easy to tabulate their cost, etc., without giving detailed description.

298. Looms may be driven from a shaft under the floor, or from one above. In the latter case, the draft must be carefully located over the alleys, and never directly over the looms, on account of the liability of oil dripping from the bearings on to the cloth or the warp. No matter what kind of bearing or oil pan is used, some oil will drip on the cloth at some time, if the shaft is over the loom. One oil spot on a piece of cloth or on the warp will cause the cloth to pass as "seconds."

299. With the decreasing cost of electric power brought about by hydro-electric developments, many mills of today use the individual motor drive for their looms. Some mills generate their own electric power from steam power.

This method of driving the looms saves a large amount of power which is ordinarily lost in driving long lines of shafting.

Looms are generally arranged in parallel lines lengthwise building, about as shown in Fig. 53, half of them being right hand and half left hand, to throw the driving pulleys together. The pulley ends of loom are placed as close together as possible, while an alley of 16 to 18 inches is left between the projecting lays at the other end. The breast beams are placed 24 to 26 inches apart, making the "weaver's alley." The distance between backs of looms is somewhat greater, generally 30 to 36 inches. This is the "back alley." It may be much narrower but should be as wide as the space will permit, to facilitate the handling of yarn beams. Four lines are placed in one span between columns, as shown. The width of back alleys is regulated, therefore, by the width of loom, and the distance between columns.

The overhead driving shaft is over the middle of back alley. The looms are placed staggering, or zigzag, as shown, so that one shaft may drive into lines of looms.

The hand of a loom is determined by standing at breast beam and noting whether driving pulley is on right or left. Specifications.

300. The following is a sample blank to be filled out in ordering common looms:

Width of Cloth to Weave\_

Number of Looms.

Number Right Hand

Number Left Hand

For Plain or Twilled Work

Heavy or Light Pattern

With or Without Auxiliary Shaft\_

How Many Cams on Auxiliary Shaf	t
How Many Harness to be Up	Down
Kind of Take-up	
Kind of Let-off	
Kind of Whip Roll	
Reed Space	

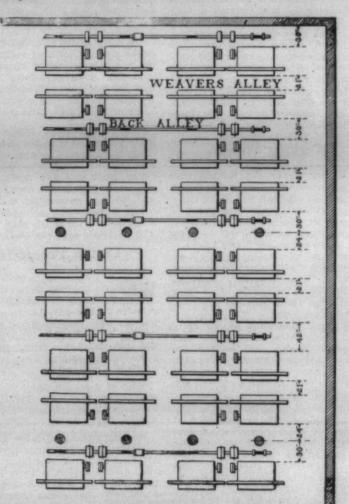


Fig. 53. Arrangement of Looms.

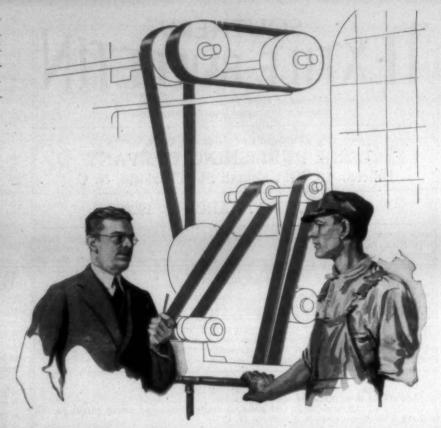
Width of Loom over all, Including Yarn Beam and Full Cloth Roll Length of Loom Frame Size Beam Heads Distance Between Heads Number Beams (1½ per loom is usual) Size of Pulleys Speed of Pulleys Shuttle Binder (or Swell) to be Wood or Iron Cloth Roll Arranged for Long or Short Cuts Diameter Cloth Roll When Full Style and Construction of Cloth to Weave Three pick Gears Furnished to make from picks per inch.

The following parts are considered to belong to the loom without extra charge:

Lease Rods. Jack Sticks. Connector Blocks. Treadle Stirrups. Lease Rod Weights. Picker Sticks.

Maker to send purchaser full set of samples to cover "supplies" necessary to start one loom.

(Continued on Page 24)



## "Don't take my word for it... take the machine's"

"You don't need to ask me about excessive slippage, cracking or burnand hurrying out the work.

"Remember the trouble it used to give? Starved for power. Speed low. Holding up production. Down for belt repairs. No more of that! Not since we called in Graton & Knight and got the belts that were standardized for this work."

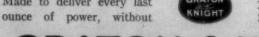
There is a Graton & Knight Standardized Leather Belt for every drive in your plant. Standardized to meet every condition of speed, load, overload and pulley size. Standardized in manufacture - in choice of live, sturdy leather. Made to deliver every last

those belts. Just watch how the ing. Able to give the long-term machine is leaning against the collar production-boosting service that only the right belt can.

Over three hundred thousand of the soundest, finest packer steer hides are processed in our tanneries each year. This stock—the largest reserve of belting leather in the world-plus controlled, standardized production, makes our prices, quality for quality, 5 to 10 per cent lower than the field.

Check up your belting against the definite recommendations that have cut belting costs on over two hundred types of machines in fourteen

> different industries. It places you under no obligation. Send in the coupon today.



## Standardized

## LEATHER BELTING

→ MAIL ME TODAY ←

THE GRATON & KNIGHT MFG. CO., Worcester, Mass., U. S. A. 101-Q

Name \_

Company

Prices, quality for quality, 5 to 10% lower than the field akers of belts, straps, packings, fan belts, lace leather, etc.

# TEXTILE BULLETIN

Member of Audit Bureau of Circulations Member of Associated Business Papers, Inc.

Published Every Thursday By

## CLARK PUBLISHING COMPANY

Offices: 18 West Fourth St., Charlotte, N. C.

#### THURSDAY, MARCH 11, 1926

DAVID CLARK	Managing Editor
D. H. HILL, JR.	Associate Editor
JUNIUS M. SMITH	Business Manager

#### SUBSCRIPTION

One year, payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

#### ADVERTISING

Advertising rates furnished upon application.

Address all communications and make all drafts, checks and money orders payable to Clark Publishing Company, Charlotte, N. C.

#### No Mystery

COTTON manufacturers in North Carolina have been wondering why all this hubbub about investigating or surveying the cotton mills.

Neither the cotton mills nor the mill villages are locked, and if any wrong is being done, it would be very easy for the ladies to take a short walk to the mills and see the conditions for themselves.

There is no mystery to us about the whole business.

The women in the Children's Bureau and the Women's Bureau of the United States Department of Labor expect to get a \$1,000,000 per year fund through the ratification of the Federal Child Labor Amendment and knowing that the manufacturers of North Carolina lead the movement that kept them away from the pie counter they are itching to get revenge.

They have for two years been working to get a chance at North Carolina, and if given the opportunity they could write their report without leaving Washington

without leaving Washington.

As a sample of the false statements that they would make, we quote the following extract from a letter written, last year, by Secretary of Labor, J. J. Davis to David Clark.

"The investigations made in North Carolina by agents of the Children's Bureau immediately after the first Federal Child Labor Law as declared unconstitutional showed that prompt advantage had been taken of the decision of the Supreme Court to employ a considerable number of children under 10 years of age."

Everybody knows that children under 10 years of age were not employed, in fact, at that time no children under 14 except boys between 12 and 14 during summer vacations could be employed under North Carolina laws.

The report as stated by Secretary Davis is a fair sample of the report that would be made by the Women's Bureau.

W. H. Swift, of Greensboro, N. C., Southern secretary of the National Child Labor Committee became very angry when he found that the Federal Child Labor Amendment was going to be defeated and speaking at a Child Labor Meeting at Providence, R. I., on November 24th, said:

"Now I'll tell you what we've been doing down in my own State of North Carolina. We have been allowing children to work at jobs known to be extra hazardous. We have been chopping off legs, putting out eyes. We have let a girl with flowing skirts work near machines that catch the skirt, roll her body around the machinery and dash out her brains. Then we have buried her and said it was the grace of God."

Accidents in cotton mills are very rare and Swift was fully aware of the fact that he was misrepresenting his State, but he was sore because he had lost and he is still sore.

An account of the recent meeting of North Carolina Club Women said: Mrs. W. H. Swift, introduced the following resolution:

"We, in co-operation with the League of Women Voters, Federation of Women's Clubs and Young Women's Christian Associations, request the child welfare commission of North Carolina to request the Federal Women's Bureau to make a study of the working conditions of women in North Carolina."

Thus we find Mrs. Swift carrying on the work for W. H. Swift and some light is thereby thrown upon the present agitation.

The real force, however, behind the agitation is Mrs. Mary O. Cowper, of Durham, N. C.

Mrs. Cowper is a Northern woman, who is forced to live in North Carolina by reason of the fact that

her husband is a teacher of sociology at Duke University.

According to report, Mrs. Cowper

According to report, Mrs. Cowper has never been able to seen anything good in North Carolina and spends most of her time knocking the State and its people.

She is known to be very radical and during the past summer attended the conference at Geneva, but we do not know her mission there.

The real forces behind the effort to investigate the cotton manufacturing of North Carolina are the Women's Bureau of the U. S. Department of Labor and W. H. Swift, both seeking revenge and a very radical Northern woman who finds North Carolina distastefful to her.

#### Working Women

WE suggest to the women who seem so interested in surveying the women who work in North Carolina, that the largest employers of women are the women themselves.

women are the women themselves.

Cooks and servant girls get less pay and work longer hours than any other class of women and they receive only about one third as much in North Carolina as they do in the North. The fact that most of them have black skins does not alter the above statements.

Reaching Charlotte on an early train one morning last fall we went home on a car that carried the cooks to their work and we heard one of them discussing a prominent Charlotte club woman say "She sho is one hell cat."

We wonder what the women who are pressing for the investigation of women in industry say about first investigating "women in domestic service" and of making official record of the wages paid, the hours worked and incidentally the treatment they receive.

If women who work are to be investigated why not start with the largest and most oppressed class, those in domestic service.

#### No Shock to Us

THE National Child Labor Committee has sent out a special bulletin announcing the retirement of secretary Owen Jovejoy, and stating that the news will come "as a distinct shock."

We wish to say that it was no shock to us.

Owen Lovejoy left the National Child Labor Committee for the same reason that a hog leaves a swill trough, that is, the food ran out.

For years Owen Lovejoy has lived on money collected from well meaning people by misrepresentations.

The campaign against the Federal Child Labor Amendment made the people of this country realize true conditions, and they quit contributing to the support of the parasites of the National Child Labor Committee.

When Eugene Debs, the socialist, was, during war, imprisoned for disloyalty, Owen Lovejoy wrote him a "love letter."

Now that an empty trough has forced the retirement of Lovejoy it certainly would be fine if Debs wrote him a letter of sympathy.

#### Current Cotton Goods Business

IN the face of so many bad reports being put out by the mills, the weekly report of the Hunter Manufacturing and Commission Company on the business actually done is enlightening. It says in part:

"In spite of the fact that the grey goods market has been handicapped by a declining cotton market the past few days, our sales for the current week are larger than those for last week and on a parity with those of two weeks ago.

"Some additional business has been placed on pajama checks for delivery running through the summer months. Only in a few exceptional cases has the decline from last week exceeded % cent per yard and this has done little more than carry prices back to where they stood at the first of the year."

#### Cotton Prospects

WE have no reliable information upon which to base an opinion relative to the 1926 cotton acreage, but we wish to caution against accepting at their face value most of the statements now being made expressing the opinion that as much or more acreage will be planted.

Most of them are opinions of men who have made no investigation whatever and should carry no weight.

Records show that there have invariably been reductions in acreage after periods of declining prices and with wheat and corn high in proportion to cotton it does seem reasonable that much land will be shifted.

Fertilizer sales up to the present time have been about 1,400,000 tons as against 1,100,000 tons to this date last year.

This would seem to indicate an increase in acreage but there is a suggestion that the total for the spring will not exceed last year.

A report of the Master Federation of Cotton Spinners estimates the world's consumption of American cotton for the six months at 6,987,-000 bales against 7,022,000, which would indicate approximately the same consumption as last year and the carry-over of August 1, 1926, is estimated at 1,300,000 bales in excess of last August 1st.

No one knows what weather conditions will prevail but should we have a rainy spring or summer it is entirely possible, even with a larger acreage, to raise a crop of under 14,000,000 bales and a crop of that size would not be a burden upon the market.

We have at the present time no opinion about the 1926 acreage because we can find nothing upon which to base a definite opinion and we do not believe that those who are now expressing their opinions have any definite basis for same.

We caution against taking any very definite position at this time.

## Personal News

Durant Pressley, of Mount Holly, N. C., is now located at Monroe, N. C.

W. M. O'Daniel, of Greenville, S. C., has become overseer of carding at the Aiken Mills, Bath, S. C.

R. W. Herd has resigned as overseer spinning at the Dunean Mills, Greenville, S. C.

—, —. Elmore has accepted the position of superintendent of the Wymojo Cotton Mills, Rock Hill, S. G.

J. F. Corley has resigned as night overseer of carding at the Kindley Cotton Mill, Mount Pleasant, N. C.

G. W. Dearman has become night overseer carding at the Kindley Cotton Mills, Mount Pleasant, N. C.

M. A. Storey has resigned as superintendent of the Knoxville Cotton Mills, Knoxville, Tenn.

J. F. Armstrong has resigned as superintendent of the Wymojo Mills, Rock Hill, S. C.

C. B. Johnson has been promoted to overseer weaving at the Globe Cotton Mills, Augusta, Ga.

F. L. Robbins has resigned as general superintendent of the Carolina Textile Corporation, Dillon, S. C.

G. B. Tomlin, of Sylacauga, Ala., has accepted a position with the new Pepperel Mills, Opelika, Ala.

L. M. Smith, overseer of spinning at the Liberty Mill No. 3, Liberty, S. C., has been transferred to a similar position at the Mill No. 1.

J. F. James, of Macon, Ga., is now overseer of spinning and twisting at the Washington Manufacturing Company. Tenille. Ga.

T. B. Stevenson has accepted the position of superintendent of the Knoxville Cotton Mills, Knoxville, Tenn

G. W. Conrad, formerly of the Patterson Mills, Roanoke Rapids, N. C., has accepted a position with the Erwin Mills, Erwin, N. C.

George H. Parker, of Thomaston, Ga., has accepted the position of overseer of spinning and spooling at the Bibb Manufacturing Company, No. 1. Macon, Ga.

D. L. Howard, manager of the store at the Brookford Mills, Brookford, N. C., has been made assistant superintendent of the mill.

J. B. Duvall, secretary and assistant treasurer of the Brookford Mills, Brookford, N. C., will hereafter act as superintendent also. He succeeds H. F. Moody, who recently retired.

Fred Gossett has been transferred from second hand in spinning at the Woodside Mills, Greenville, to overseer of spinning at the Liberty Mill No. 3, Liberty, S. C.

A. B. Smith, of Augusta, Ga., has become overseer of weaving at the Jewell Cotton Mills, Jewell, Ga.

W. C. Johnson has resigned as overseer spinning at the Woodside Mills, Greenville, S. C., to accept a similar position at the Dunean Mills, of the same place.

H. E. Runge, formerly of the Draper Corporation, is now superintendent of the Grendel Mills No. 1, Greenwood, S. C., instead of Grendel No. 2, as reported last week.

L. L. Thompson, overseer of spinning at the Liberty Mill No. 2, Liberty, S. C., has been transferred to overseer spinning at the Woodside Mill in Greenville, the plants being under the same management.

M. T. Poovey has resigned as superintendent if the Henry River Manufacturing Company, Henry River, N. C., to become general superintendent of Mills Nos. 1, 2 and 3 of the Carolina Textile Corporation, Dillon, S. C.

#### Wills Hunter Promoted.

Wills D. Hunter, formerly of Charlotte, N. C., has been promoted from assistant treasurer to treasurer of the Saco-Lowell Shops, succeeding Robert F. Herrick, Jr., who was advanced to vice-president and general agent.

Mr. Hunter who is a native of North Carolina was formerly a salesman with the Charlotte office of the Saco-Lowell Shops and was advanced to assistant treasurer about one year ago. He married the daughter of the late R. M. Miller, Jr., of Charlotte.

#### Gordon Johnstone Ill.

Gordon Johnstone, general superintendent of the Winnsboro (S. C.) Mills and former president of the Southern Textile Association, is reported to be seriously ill at his home at Winnsboro, S. C.

#### Gastonia Brush Co. Enlarges.

The Gastonia Brush Company, of Gastonia, N. C., which was established more than a year ago, has been reorganized and is now operating its plant at capacity. The company manufactures cotton mill brushes only, specializing on the various types of mill brushes best suited for different departments in the mill.

The plant of the Gastonia Brush Company is unusually well equipped, employing the latest type automatic machinery to produce brushes of approved patterns and designs.

C. E. Honeycutt is manager of the Gastonia Brush Company and A. B. Carter, well known textile machinery agent, is treasurer.

# Bobbins and Spools

Particular attention given to

All Types Of Warp Bobbins For Filling Wind

Samples of such bobbins gladly furnished

The Dana S. Courtney Co. Chicopee, Mass.

A. B. CARTER, Southern Agt, Gastonia, N. C.



# EXTILE BULLETI

Published Every Thursday By

#### CLARK PUBLISHING COMPANY Offices: 18 West Fourth St., Charlotte, N. C.

#### THURSDAY, MARCH 11, 1926

DAVID CLARK D. H. HILL, JR. JUNIUS M. SMITH		Managing Editor Associate Editor Business Manager
	SUBSCRIPTION	
One year, payable in advance		\$2.00
Other Countries in Postal Union Single Copies		4.00

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

#### ADVERTISING

Advertising rates furnished upon application.

Address all communications and make all drafts, checks and money orders payable to Clark Publishing Company, Charlotte, N. C.

#### No Mystery

COTTON manufacturers in North Carolina have been wondering why all this hubbub about investigating or surveying the cotton mills.

Neither the cotton mills nor the mill villages are locked, and if any wrong is being done, it would be very easy for the ladies to take a short walk to the mills and see the conditions for themselves.

There is no mystery to us about the whole business.

The women in the Children's Bureau and the Women's Bureau of the United States Department of Labor expect to get a \$1,000,000 per year fund through the ratification of the Federal Child Labor Amendment and knowing that the manufacturers of North Carolina lead the movement that kept them away from the pie counter they are itching to get revenge.

They have for two years been working to get a chance at North Carolina, and if given the opportunity they could write their report without leaving Washington.

As a sample of the false statements

that they would make, we quote the following extract from a letter written, last year, by Secretary of Labor, J. J. Davis to David Clark.

"The investigations made in North Carolina by agents of the Children's Bureau immediately after the first Federal Child Labor Law as declared unconstitutional showed that prompt advantage had been taken of the decision of the Supreme Court to employ a considerable number of children under 10 years of age."

Everybody knows that children under 10 years of age were not employed, in fact, at that time no children under 14 except boys between 12 and 14 during summer vacations could be employed under North Carolina laws.

The report as stated by Secretary Davis is a fair sample of the report that would be made by the Women's Bureau.

W. H. Swift, of Greensboro, N. C., Southern secretary of the National Child Labor Committee became very angry when he found that the Federal Child Labor Amendment was going to be defeated and speaking at a Child Labor Meeting at Provi-dence, R. I., on November 24th, said:

"Now I'll tell you what we've been do-ing down in my own State of North Caro-lina. We have been allowing children to work at jobs known to be extra hazardous. We have been chopping off legs, putting out eyes. We have let a girl with flowing skirts work near machines that catch the skirt, roll her body around the machinery and dash out her brains. Then we have buried her and said it was the grace of God."

Accidents in cotton mills are very rare and Swift was fully aware of the fact that he was misrepresenting his State, but he was sore because he had lost and he is still

An account of the recent meeting of North Carolina Club Women said: Mrs. W. H. Swift, introduced the following resolution:

"We, in co-operation with the League of Women Voters, Federation of Women's Clubs and Young Women's Christian As-sociations, request the child welfare com-mission of North Carolina to request the Federal Women's Bureau to make a study of the working conditions of women in of the working conditions of wor North Carolina."

Thus we find Mrs. Swift carrying on the work for W. H. Swift and some light is thereby thrown upon the present agitation.

The real force, however, behind the agitation is Mrs. Mary O. Cow-per, of Durham, N. C.

Mrs. Cowper is a Northern wo-man, who is forced to live in North Carolina by reason of the fact that

her husband is a teacher of soci-

ology at Duke University.

According to report, Mrs. Cowper has never been able to seen anything good in North Carolina and spends most of her time knocking the State and its people.

She is known to be very radical and during the past summer attendthe conference at Geneva, but

we do not know her mission there.
The real forces behind the effort investigate the cotton manufacturing of North Carolina are the Women's Bureau of the U.S. Department of Labor and W. H. Swift, both seeking revenge and a very radical Northern woman who finds North Carolina distasteflul to her.

#### Working Women

WE suggest to the women who seem so interested in surveying the women who work in North Carolina, that the largest employers of women are the women themselves.

Cooks and servant girls get less pay and work longer hours than any other class of women and they re-ceive only about one third as much in North Carolina as they do in the North. The fact that most of them have black skins does not alter the above statements.

Reaching Charlotte on an early train one morning last fall we went home on a car that carried the cooks to their work and we heard one of them discussing a prominent Charlotte club woman say "She sho is one hell cat."

We wonder what the women who are pressing for the investigation of women in industry say about first investigating "women in domestic investigating

service" and of making official rec-ord of the wages paid, the hours worked and incidentally the treatment they receive. If women who work are to be in-

vestigated why not start with the largest and most oppressed class, those in domestic service.

#### No Shock to Us

THE National Child Labor Committee has sent out a special bulletin announcing the retirement of secretary Owen Jovejoy, and stat-ing that the news will come "as a distinct shock."

We wish to say that it was no shock to us.

Owen Lovejoy left the National Child Labor Committee for the same reason that a hog leaves a swill trough, that is, the food ran out.

For years Owen Lovejoy has lived on money collected from well meaning people by misrepresentations.

The campaign against the Federal Child Labor Amendment made the people of this country realize true conditions, and they quit contribu-ting to the support of the parasites of the National Child Labor Committee.

When Eugene Debs, the socialist, was, during war, imprisoned for disloyalty, Owen Lovejoy wrote him

Now that an empty trough has forced the retirement of Lovejoy it certainly would be fine if Debs wrote him a letter of sympathy.

#### **Current Cotton Goods** Business

N the face of so many bad reports being put out by the mills, the weekly report of the Hunter Manufacturing and Commission Company the business actually done is enlightening. It says in part:

'In spite of the fact that the grey goods market has been handicapped a declining cotton market past few days, our sales for the current week are larger than those for last week and on a parity with those of two weeks ago.

"Some additional business has been placed on pajama checks for delivery running through the summer months. Only in a few exceptional cases has the decline from last week exceeded % cent per yard and this has done little more than carry prices back to where they stood at the first of the year."

#### Cotton Prospects

WE have no reliable information upon which to base an opinion relative to the 1926 cotton acreage, but we wish to caution against accepting at their face value most of the statements now being made expressing the opinion that as much or more acreage will be planted.

Most of them are opinions of men who have made no investigation whatever and should carry no weight.

Records show that there have invariably been reductions in acreage after periods of declining prices and with wheat and corn high in proportion to cotton it does reasonable that much land will be

Fertilizer sales up to the present time have been about 1,400,000 tons as against 1,100,000 tons to this date last year.

This would seem to indicate an increase in acreage but there is a suggestion that the total for the spring will not exceed last year.

A report of the Master Federation of Cotton Spinners estimates the world's consumption of American cotton for the six months at 6,987,-000 bales against 7,022,000, would indicate approximately the same consumption as last year and the carry-over of August 1, 1926, is estimated at 1,300,000 bales in excess of last August 1st.

No one knows what weather conditions will prevail but should we have a rainy spring or summer it is entirely possible, even with a larger acreage, to raise a crop of under 14,000,000 bales and a crop of that size would not be a burden upon the market.

We have at the present time no opinion about the 1926 acreage because we can find nothing upon which to base a definite opinion and we do not believe that those who are now expressing their opinions have any definite basis for same.

We caution against taking any very definite position at this time.

## Personal News

Durant Pressley, of Mount Holly, N. C., is now located at Monroe, N. C.

W. M. O'Daniel, of Greenville, S. C., has become overseer of carding at the Aiken Mills, Bath, S. C.

R. W. Herd has resigned as overseer spinning at the Dunean Mills, Greenville, S. C.

—. —. Elmore has accepted the position of superintendent of the Wymojo Cotton Mills, Rock Hill, S. C.

J. F. Corley has resigned as night overseer of carding at the Kindley Cotton Mill, Mount Pleasant, N. C.

G. W. Dearman has become night overseer carding at the Kindley Cotton Mills, Mount Pleasant, N. C.

M. A. Storey has resigned as superintendent of the Knoxville Cotton Mills, Knoxville, Tenn.

J. F. Armstrong has resigned as superintendent of the Wymojo Mills, Rock Hill, S. C.

C. B. Johnson has been promoted to overseer weaving at the Globe Cotton Mills, Augusta, Ga.

F. L. Robbins has resigned as general superintendent of the Carolina Textile Corporation, Dillon, S. C.

G. B. Tomlin, of Sylacauga, Ala., has accepted a position with the new Pepperel Mills, Opelika, Ala.

L. M. Smith, overseer of spinning at the Liberty Mill No. 3, Liberty, S. C., has been transferred to a similar position at the Mill No. 1.

J. F. James, of Macon, Ga., is now overseer of spinning and twisting at the Washington Manufacturing Company, Tenille, Ga.

T. B. Stevenson has accepted the position of superintendent of the Knoxville Cotton Mills, Knoxville, Tenn.

G. W. Conrad, formerly of the Patterson Mills, Roanoke Rapids, N. C., has accepted a position with the Erwin Mills, Erwin, N. C.

George H. Parker, of Thomaston, Ga., has accepted the position of overseer of spinning and spooling at the Bibb Manufacturing Company, No. 1, Macon, Ga.

D. L. Howard, manager of the store at the Brookford Mills, Brookford, N. C., has been made assistant superintendent of the mill.

J. B. Duvall, secretary and assistant treasurer of the Brookford Mills, Brookford, N. C., will hereafter act as superintendent also. He succeeds H. F. Moody, who recently retired.

Fred Gossett has been transferred from second hand in spinning at the Woodside Mills, Greenville, to overseer of spinning at the Liberty Mill No. 3, Liberty, S. C.

A. B. Smith, of Augusta, Ga., has become overseer of weaving at the Jewell Cotton Mills, Jewell, Ga.

W. C. Johnson has resigned as overseer spinning at the Woodside Mills, Greenville, S. C., to accept a similar position at the Dunean Mills, of the same place.

H. E. Runge, formerly of the Draper Corporation, is now superintendent of the Grendel Mills No. 1, Greenwood, S. C., instead of Grendel No. 2, as reported last week.

L. L. Thompson, overseer of spinning at the Liberty Mill No. 2, Liberty, S. C., has been transferred to overseer spinning at the Woodside Mill in Greenville, the plants being under the same management.

M. T. Poovey has resigned as superintendent if the Henry River Manufacturing Company, Henry River, N. C., to become general superintendent of Mills Nos. 1, 2 and 3 of the Carolina Textile Corporation, Dillon, S. C.

#### Wills Hunter Promoted.

Wills D. Hunter, formerly of Charlotte, N. C., has been promoted from assistant treasurer to treasurer of the Saco-Lowell Shops, succeeding Robert F. Herrick, Jr., who was advanced to vice-president and general agent.

Mr. Hunter who is a native of North Carolina was formerly a salesman with the Charlotte office of the Saco-Lowell Shops and was advanced to assistant treasurer about one year ago. He married the daughter of the late R. M. Miller, Jr., of Charlotte

#### Gordon Johnstone Ill.

Gordon Johnstone, general superintendent of the Winnsboro (S. C.) Mills and former president of the Southern Textile Association, is reported to be seriously ill at his home at Winnsboro, S. C.

#### Gastonia Brush Co. Enlarges.

The Gastonia Brush Company, of Gastonia, N. C., which was established more than a year ago, has been reorganized and is now operating its plant at capacity. The company manufactures cotton mill brushes only, specializing on the various types of mill brushes best suited for different departments in the mill.

The plant of the Gastonia Brush Company is unusually well equipped, employing the latest type automatic machinery to produce brushes of approved patterns and designs.

C. E. Honeycutt is manager of the Gastonia Brush Company and A. B. Carter, well known textile machinery agent, is treasurer.

# Bobbins and Spools

Particular attention given to

All Types Of Warp Bobbins For Filling Wind

Samples of such bobbins gladly furnished

The Dana S. Courtney Co. Chicopee, Mass.

A. B. CARTER, Southern Agt, Gastonia, N. C.



## MILL NEWS ITEMS OF INTEREST

Houston, Texas .- The Paramount Hosiery Mills has been incorporated and will install additional equipment in its plant at 4010 Wilmer street.

Sherman, Texas.—The Sherman Cotton Mills have let contract to Wood and Alman for erection of the addition to their mill.

Central Falls, N. C .- Pennyslvania Textile Mills, Inc., have let contract to Grier-Lowrance Construction Co., Statesville, for 46x100-ft. addition to varn mill.

Johnson City, Tenn.—Huntington & Guerry, Greenville S. C., has contract for electrical wiring at American Bemberg Corp.'s plant; Lock-wood, Greene & Co., are the engineers.

Monticello, Ark.—The Monticello Cotton Mills, which were recently reorganized, as noted, expect to spend \$250,000 for erection of a steel and concrete and installation of new equipment.

Kinston, N. C.—The offices of the Kinston Cotton Mills, located in the business district here, were moved to the plant at East Kinston. The management of the mills is reducing operating expenses, ad at the same time facing a year expected to be the most profitable in many.

Spartanburg, S. C.—Operation of the Powell Knitting Company's new plant on the site of the old Model Mill, which started a few weeks ago, this week resulted in the first ship-ments of hosiery. Practically all of the output from the plant is being shipped to the middle West, where it is distributed. Some of the prod-uct goes to Ohio and some to Indi-

The company manufacturers cotton work socks, the product which its Philadelphia plant has been producing for 35 years. A large chain store organization which operates 650 stores has just sent the Powell company here instruction regarding shipment of merchandise.

Laurens, S. C .- Simultaneously with the turning on of electric cur-rent at the Laurens Cotton Mills, at Laurens, the plant put into operation for the first time 4,112 spindles. The added equipment at the mill gives the plant a total of 48,944 spindles. For the present only that part of the mill equipped with the new machinery is being run by electricity but electrical equipment for the entire mill will be installed within a few months, it is stated.

W. S. Montgomery, of Spartan-burg, treasurer and manager of the Laurens Cotton Mills, was present for the turning on of the electricity and expressed himself pleased with the progress made. Power for the plant is furnished by the Blue Ridge Power Company.

that the contract for the erection of the mill building for the recently organized Roseboro Mills will be

Danville, Va .- The Riverside and River Cotton Mills have placed orders with G. G. Slaughter, Charlotte for an equipment of Sipp winders for handling rayon.

#### THE FARISH COMPANY

COMMISSION MERCHANTS



100 WORTH STREET **NEW YORK** 



#### I. E. SIRRINE & COMPANY

Engineers

Textile Mills; Hydro-Electric Developments; Tobacco Products Plants, Cotton, Tobacco and General Warehousing; Industrial Housing; Steam Power Plants; Steam Utilization.

Greenville South Carolina



Chattanooga

#### LIBERTY MUTUAL INSURANCE COMPANY

W. R. Pederson, Resident Manager
Carolina National Bank Building, Spartanburg, S. C.
Employers' Liability insurance, Automobile insurance, Public Liability insurance
insurance
Cash refunds to policyholders, amounting to nearly \$13,000,000 since organization, have realized savings to them of at least 20% of the standard stock

## MERROWING

Stocking Welting Toe Closing Mock Seaming

Maximum Production Minimum Cost of Upkeep Unexcelled Quality of Work

THE MERROW MACHINE COMPANY

20 Laurel Street, Hartford, tonn

Members American Society Landscape Architects

## E. S. DRAPER

1516 E. Fourth St. CHARLOTTE, N. C.

101 Marietta Bldg. ATLANTA, GA.

LANDSCAPE ARCHITECT and ENGINEER

Town Planning and Mill Villages Real Estate Subdivisions and Resorts
Country Clubs and Golf Courses
Private Estates ani Home Grounds
Parks, Playgrounds and Cemeteries Complete Topographic Surveys
General Designs, Grading, Planting
and Detail Plans

Supervision of Landscape and Engineering Construction.

Largest Landscape Organization in the South

Gaffney, S. C .- The Vogue Mills have purchased rayon winding equipment from the Sipp Machine Co., Paterson, N. J., the order being handled through G. G. Slaughter, Southern agent.

Coleridge, N. C.—It is understood that the Enterprise Manufacturing Company has engaged Lockwood, Greene & Co., Charlotte, as engineers for an addition to the mill. They plan to complete the unfinished building, install additional machin-ery and a heating and power plant, the work to cost \$50,000.

Rock Hill, S. C .- The Rock Hill Lumber Company has been awarded a contract to furnish material for and build 25 new houses at Red River Mills, four miles from Rock Hill, it was announced.

The building program is being undertaken with a view to expanding operations, it is understood. The plant formerly known as Carhartt Mill No. 2, and was purchased last fall by a corporation composed largely of local men.

Fitzgerald, Ga.—Two tons of cotton quilts, manufactured by the Fitzgerald Cotton Mills, were shipped last week to a large Eastern mail order house. This is said to be the largest individual shipment of a similar article from a Georgia mill.

During the past year, the Fitzger-ald Cotton Mills added this depart-ment to its equipment and has found ready outlet for their entire output through mail order houses, it is said.

Gadsden, Ala. — The Sanquoit Spinning Company, of Utica, New York, which is to move its plant to this place, as first reported in these columns several weeks ago, states that the local plant will have 20,000 spindles and that the building and machinery investment will run. machinery investment will run close to \$1,000,000. In addition to the equipment, the company will invent \$150,000 cash in the project, while local business men will take an additional \$150,000 in stock.

Plans for the new building are

now being prepared and it is expected that it will be completed this summer. W. H. Merriman, present manager of the mill, is expected to move here to manage the plant, and to supervise its construction. to supervise its construction.

The mill will manufacture 6s to The mill will manufacture 6s to 30s yarns, heathers and colors. Francis K. Kerman is president of the company and A. M. Waterburym treasurer. Gadsden men who will become directors include Otto Agricola, O. R. Hood and J. L. Herring. The building will be of brick and concrete construction and will be modern in avery particular. The

concrete construction and will be modern in every particular. The main structure will be 100 by 400 feet in dimensions and there will be several others 80 by 100 feet. They will occupy a site of 10 acres, which has not yet been definitely selected. Architects are now at work on the

plans and it is expected that construction contracts will be awarded within the next week or so. Employment will be given 400 people and if night work required, as the promoters expect, between 700 and 800 people will be needed.

Winchester, Va. —Jones Woolen mills Corporation has let contract to Rockwood Sprinkler Company, Commercial National Bank Building, Charlotte, N. C., for installing automatic wet pipe system throughout the plant, together with private outside fire protection system, including 2 private hydrants with ususal underground equipment, hose equipment for hydrants; let contract to Pittsburg-Des Moines Steel Co., Atlanta, Ga., for installing 50,000 gallon gravity tank; Jones Woolen Mills Corporation will handle tank work, mason and carpenter works, tank foundation.

Fort Mill, S. C.—George Fish, recently elected vice-president of the Fort Mill Manufacturing Company has made announcement of the definite plans to discontinue the manufacture of ginghams at the company's mill No. 1 and engage in the manufacture of wide sheetings which will be bleached at a plant to be erected here and prepared for the market in the form of sheets and pillow cases, as previously noted.

The plan will involve the expenditure in the immediate future of \$400,000 in the installation of proper machinery and equipment.

Durham, N. C.—The Golden Belt Manufacturing Company, said to be the largest firm manufacturing small cotton bags, largely for smoking tobacco, in the world, will operate a new department in the near future, manufacturing full-fashioned silk hosiery.

The first three of a dozen hosiery machines ordered are being unloaded, the remainder to arrive at the rate of three a month. When the machines, said to be of the latest design and highest speed, are all installed, the capacity will be 144 doezn pairs of hosiery for each 8-hour working day.

Overhauler Wanted

We need an experienced overhauler to do some work on pickers, cards and fly frames. None but thoroughly capable men need apply. Address J. A. D., care Southern Textile Bulletin.



WELL DRILLING AND DEEP WELL PUMPS

We do the engineering, and have had 32 years experience solving water problems satisfactorily for textile mills.

SYDNOR PUMP & WELL CO., Inc. Richmond, Va. Cedartown, Ga.—The No. 2 Mill of the Cedartown Cotton and Export Co., will be taken over by the Goodyear Tire and Rubber Co., of Akron, Ohio, according to announcement by Charles Adamson, president of the mill company.

The plant has 12,000 spindles and the Goodyear Company will make additions and alternations and increase the spindleage to 30,000, adding equipment for weaving, and twisting to produce cord fabrics, according to the announcement. Lockwood, Greene & Co., are expected to be the engineers.

Henderson, N. C.—The McKinney Hosiery Co., Inc., began operations here this week. A complete knitting mill outfit has been installed and both men's and women's hosiery will be manufactured. About 100 dozen pairs a day will be turned out, for the present, but the company expects to increase the output to 500 dozen pairs a day within six months.

A dyeing and finishing plant will also be installed. R. J. Corbett and P. A. McKinney are the owners of the plant and Mr. McKinney, formerly of Durham, will be manager.

#### Gaston Mills May Curtail.

Reports from Gaston county on Tuesday indicate that the mills there are finding present conditions in the fine yarn market so unsatisfactory that curtailment may be instituted within the next week or ten days. Several of the mills are curtailing now, but on the whole the plants are running full time, and the average mill has sufficient orders on hand to stay in operation for at least two weeks. On account of the slack demand, however, well posted mill men in Gaston county believe that curtailment will become general there unless conditions improve rapidly.

#### Georgia Mill Men Meet.

The Textile Operating Executives of Georgia met in Atlanta, on Tuesday of this week, the meeting being devoted to a discussion of carding and spinning. A questionaire was recently sent all members and was used as the basis for the discussion at the meeting.

at the meeting.

Lack of time prevented a full accunt of this meeting in this issue, but a stenographic report will be carried next week.

#### Max Einstein to Build Plant.

Max Einstein, of Charlotte, president of the Standard Chemical Company, has purchased a tract of land in Hoboken, N. J., and will erect a manufacturing plant for his corporation.

#### Move Southern Office.

The Southern offices of Penick & Ford are being moved from Greenville, S. C., to 206 Andrews-Law Building, Spartanburg, S. C. Guy L. Morrison is Southern representative of the company.

## BALING PRESS

75 to 300 Tons

With or without Motor

Any width, opening, and rise of platen to suit your work—Also Knuckle Joint and Power Screw Presses. Let us

Established 1

tell you moreabout them

Dunning & Boschert Press Co., Inc. 367 W. Water St. SYRACUSE, N. Y.

## DRUIDOAK LOOM LEATHERS

Highest Grade Oak Tanned for Cotton and Duck Looms

The Druid Oak Belting Co., Inc.

## 5740 Spindle Mill For Sale

VERY LOW PRICE 29 Cards—21 Acres 36 Houses

15,000 square feet of building not occupied. Can be used for looms or additional spinning.

Power now assured by Central Georgia Power Co.

Also have own steam plant. Mill unit motor driven. Mill equipped for 20s to 40s yarn. Splendid labor conditions.

## **Eatonton Cotton Mills**

Eatonton, Ga.

address

Frank W. Gurry

Commercial Bank Bldg.

Charlotte, N. C.

## Reliable Humidifying Devices

Better Textile Dryers
Manufactured by GRINNELL COMPANY, Inc.

## AMERICAN MOISTENING COMPANY

Atlanta Georgia

Boston Massachusetts Charlotte North Carolina

#### **Reclaiming Stained Cotton**

(Continued from Page 10)

hydro-extractor. The machine is ready for reloading and the reclaimed batch is passed through the extractor and thence the dryer.

extractor and thence the dryer.

Upon emerging from the dryer the cotton is either baled or blown through conveyor pipes to a storage bin. The best spinning results are obtained if the dryed cotton is allowed to "age" at least 24 hours after drying and before starting it through the pickers.

Experienced bleachers will notice the omission of any reference to "blueing." This omission was intentional as blueing is not essential in the reclaiming operations, which is in reality nothing more than the production of a half-bleach. However, if the mill doing this work wishes to touch up the batch with a little "blueing", in order to produce a whiter cotton, the blueing operation may be carried out in the last or softening bath. This should be done by adding the dissolved blueing in a well diluted form (four or five buckets full), and taking moderate care to see that the batch does not heat up over 100° F., as too much heat causes the blue coloring matter to go on the cotton in patches or spots.

Before proceeding with the reclaiming work the entire inside of the bleaching machine should be washed down with a thin solution of pure cement and water. This cement coating is applied with a large brush or mops and the purpose of it is to coat the iron sides and bottom of the machine so as to prevent rust stains on the edge of the batch.

If cement is not handy—use a solution of lime (ordinary white-wash), or a mixture of lime and silicate of soda in water.

The process as outlined above is not theory. It is a description of work being done by an increasing number of manufacturers both in the North and South. Furthermore, it is profitable process; one well worth investigation by every spinner of cotton yarns.

Cotton Cloth Exports for January.

Washington, March 4.—The Department of Commerce in a report just issued covering domestic exports of cotton cloths from the United States for the month of January, 1926, shows that the total shipments of unbleached cotton cloths to foreign countries reached 9,162,910 square yards, with Colombia as the leading customer at 1,-262,613 square yards and Chile at 1,104,959 square yards. Shipments of bleached cotton cloths reached a total of 8,360,937 square yards, with Philippine Islands leading at 3,493,-991 square yards and Canada at 1,-163,660 square yards.

163,660 square yards.

In printed cloths the total was 7,-751,633 square yards and the Philip-

INSPECTING
SEWING
BRUSHING
SHEARING
SINGEING
PACKAGING
FOLDING

#### Curtis & Marble Machine Co.

Textile Machinery
Cloth Room and Packaging Machinery
WORCESTER, MASS.

SOUTHERN OFFICE

1000 Woodside Bldg.

Greenville, S. C.

DOUBLING
MEASURING
WINDING
STAMPING
TRADEMARKING
CALENDER
ROLLING

TUBES CONES

## IMPERIAL RAYON COMPANY

38-44 WEST 21ST STREET
New York City
SOUTHERN REPRESENTATIVE
FRANK L. PAGE

NATURAL OR DYED

FAST OR DIRECT COLORS

Drexel Bldg., Philadelphia, Pa.

COPPING AND CONING ON COMMISSION

SKEINS COPS

SINGLE END PLIED

LOCALINA DE CONSTRUCTION SERVICEABLE L'COLUMBIUS TAPE L'COLUMBIUS TAPE L'COLUMBIUS TAPE COLUMBIUS CARRESTER L'COLUMBIUS CARRESTER L'

Established 1896

Incorporated 1914

LOWELL SHUTTLE COMPANY

Manufacturers of

BOBBINS

SPOOLS

SHUTTLES

Write or Telegraph for Quotations

Office and Factory: 19 Tanner St., LOWELL, MASS

"HIGH GRADE"

BOBBINS
SPOOLS
SHUTTLES
SKEWERS
ROLLS, ETC.

OF EVERY DESCRIPTION

THE DAVID BROWN COMPANY

Lawrence, Mass.

Correspondence Solicited

Catalog on Request

**AUTOMATIC SHUTTLES** 

Our Automatic Shuttles are giving Perfect Satisfaction in Leading Mills throughout the country on all classes of work

## PATENTS

armer member of the Examining s in the United States Patent e. Convenient for personal inter-

PAUL B. EATON

Registered Patent Attorney Main Office:

1214 Independence Building, Charlotte, N. C. Telephone 7141.

Other Offices:
Over Realty Bond, Winston-Salem,
903 Grant Flace N. W.,
Washington, D. C.

## **PATENTS**

Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over thirty years active practice. Experienced, personal, conscientious service.

Write for terms. Address

SIGGERS & SIGGERS

Patent Lawyers suite 34 N. U. Washington, D. C.

#### "ATLANTA" HARNESS

"Ouality and Service That Satisfies"

> ATLANTA HARNESS & REED MFG. CO.

ATLANTA, GA. P. O. Box 1375 Telephone Main 0517

Save in freight by using WILTS

Veneer Packing Cases

they are lighter and stronger, ande of perfect 2-ply Veneer Packng Case Shooks. A saving of 20 to 80 pounds in freight on every hipment because of extreme lighteas. Stronger than inch boards, urglarproof, waterproof and clean. Write for prices and samples. Convincing prices—Quick service. Wits Veneer Co., Richmond, Va.



#### Bleaching Artificial Silk

(Continued from Page 14)

baly be sufficient strength of liquor

#### Sweeping Wastes, Etc.

The fourth type of artificial silk is probably the worst to deal with, and involves the preliminary re-

moval of dire, dust, etc.

The material is then kiered with a liquor consisting of 3 per cent calcined soda, 11/2 per cent soap, and from 3 to 5 per cent verapol or other suitable fast solvent, and at a temperature ust under the boil. As before, the solution is pumped continuously through the kier and material in it. The temperature is most important both from the point of cleaning as well as fibre strength results. After kiering, the bleaching operation with hypochlorite is carried out as before outlined. It is not always possible to get a good white with this fourth class of waste after the hypochlorite bath, due to the incomplete removal of some of the impurities. Subsequent washings improve the product up to the point of full satisfaction in whiteness, however, and an even better method is first to remove all mineral oil after the first preliminary process and before the bleaching proper.—By the Technologist of the Textile Argus.

#### **Textile School Notes**

W. A. Erwin, Jr., of the Erwin Cotton Mills, Durham, N. C., made an interesting talk to the members of the Tompkins Textile Society which is composed of the students taking Textile Courses at State College, Raleigh. Mr. Erwin also presented a list of technical questions and led an informal discussion. This list contained practical questions concerning all processes from the bale to the finished fabric. Professors and students entered into the discussions.

The following donations have recently been made to the Textile School:

2 Ribbers by the Fidelity Machine Company, Frankford, Penn.

1 Knitting Machine—an infant's footer from the Hemphill Machine Company, Pawtucket, R. I.

1 Uutman Bobbin Cleaning machine for cleaning automatic loom bob-

1 "Termaco" Roving bobbin clean-er from the Terrell Machine Company, Charlotte, N. C.

The "Termaco" machine is a ma-chine method of cleaning roving bobbins. The cotton is carded off the bobbins which leaves the cotton in good condition and at the same time does not damage the bobbin which after happens when the roving is cut off with a knife.

#### Saco-Lowell Shops

Boston, Mass.-The Saco-Lowell operating loss for 1925 of \$545,654 before depreciation, while \$241,086 less than the loss incurred in 1924, must be regarded as a somewhat negative improvement since it represents the third successive yearly

loss, which, with unearned dividends paid during the period resulted in a deficit after adustments for the past three years of \$2,530,106.

Incidentally, it furnishes another enlightening commentary on the rigors of the long textile depression and the economies forced upon mills in recent years. Saco-Lowwell has been particularly hard hit in that textile manufacturers operating as a group on a very small margin of profit—if any at all—adopted a policy of retrenchment which severely cut into purchases of new machinery and replacements. As a result, Saco-Lowell Shops, the largest manufacturer of spinning ma-chinery, suffered from a sharp contraction of business which made internal economies ineffectual. While the company in 1921 had \$40,000,000 of business on its books each of the past two years has produced only about \$7,000,000 of business. Of what business has been placed by textile mills. Saco has received about half. which is its normal share.

The companys most recent balance sheet differs from that of a year ago in respect to capitalization. Of the \$2,643,750 five-year notes authorized a year ago, \$1,567,400 have been issued, while the common stock has been changed from \$100 par to no Capital structure now consists of the notes, \$1,250,000 6 per cent second preferred stock \$2,643,800 7 per cent and 52,875 shares of no-par common. Dividends on both preferred issues were suspended last year, furnishing a contrast to days not far distant when Saco-Lowell under normal textile conditions was an exceptionally properous company and a distributor of liberal divi-Balance sheet as of Dec. 31. 1925, disclosed working capital of \$3,440,841 against \$2,500,801 a year ago, but the gain was of course offset by the note issue. Notes payable still remain high at \$4,000,000.

The management has not skimped depreciation charges under prevailing adverse conditions and plant is now carried on the books at 7,367,537 less than the aggregate amount spent on it in the past seven years. Were it not for unwieldy bank loans stockholders might rest assured that when the textile depression is over Saco-Lowell would soon regain its old earning power. As matters now stand the time at which the expecied textile revival develops obviously. has an important bearing on the companys future.

Boston-Robert F. Herrick, formerly treasurer, has been elected vice-president and general agent of Saco-Lowell Shops, D. W. Hunter has been promoted from assistant treasurer to treasurer. — Boston

#### Frank B. Green Opens Office.

Frank B. Green, who for some years has been manager of the bond department of the American Trust Company, Charlotte, has severed his connection with the bank to enter the stock and bond business for himself. He has secured quarters in the Johnston Building. Mr. Green, who is well known in textile circles, will specialize in investments, stock trading and corporation finance.

## **MICLEANSER**



The Ideal **SCRUBBING POWDER** 

for TEXTILE MILL **FLOORS** 

And General Cleaning

THE DENISON MFG. CO. ASHEVILLE, N. C. Established 1915

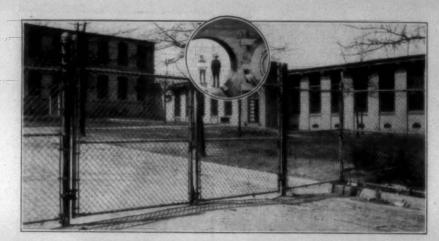
Softer texture to fabrics, better colors, more even spreading of dyes result from the better condition of textiles processed with the

#### WYANDOTTE TEXTILE ALKALIES



Ask your supply man

The J. B. FORD CO., Sole Mnfre Wyandotte, Michigan



# A Safety Deposit for Industry---

The vaults of the nation's banks guard the securities of industry with walls of steel—a precaution so obvious as to become matter of fact. In a like manner far-seeing executives are providing safety for valuable industrial property—and in this work protection fence is playing an important part. In the textile industry

more than a half million feet have been installed in the past five years. Page Fence is sturdy, durable—the choice of leading Southern Mills. Galvanized after weaving. Page Fabric has a uniform super heavy zinc coat —an assurance against corrosion. A phone call brings our representative, with complete details.



TRADE MAR America's first wire fewe-1883 GENERAL EQUIPMENT COMPANY
Realty Building Charlotte, N. C.

## **PAGE** Protection Fence

# BOBBINS-SPOOLS SKEWERS-TUBES-ROLLS

Manufacturers and Enamelers



# WALTER L. PARKER CO. LOWELL, MASS.

For Service and Prompt Attention Write Us

#### **Cotton Mill Processes and Calculations**

(Continued from Page 17)

Maker
Purchaser
Price
Terms

#### CHAPTER XII.

#### Loom Supplies

301. Unlike other machines in the mill, the loom comes to the purchaser in what seems to be a half made condition. It cannot possibly run without the addition of a lot of straps and hooks and buckles, etc., together with shuttles, reeds and harnesses, all collectively classed as "supplies."

Each particular make of loom requires its own special kind of supplies. Each maker differs more or less from the others as to exactly what constitutes "supplies," as distinguished from the loom itself. For example, some makers include, as part of the loom, the lease rods, and some consider that lease rods properly belong to supplies. It is important to have these things understood in ordering the looms, so that the purchaser may know what to expect when looms arrive, and know what supplies are to be ordered. The only safe way when putting in new looms, is to order the loom manufacturer to send a complete sample set of supplies necessary to produce the particular kind of cloth desired. These samples may then be sent to the supply dealer, and there will be a fixed responsibility as to the fit of all supplies furnished.

#### Strapping

Remarks

302. Under the head of strapping is included all the various pieces of leather or canvass about the loom, and sometimes also the necessary buckles and hooks for fastening them on. It is not safe to venture on ordering strapping except by sample to suit the particular loom and the particular goods to be made. Strapping is sometimes taken to include the pickers and picker loops.

Most of the strapping is of leather, but lug straps and picker loops are sometimes made of canvass. The leather is sold by the pound and the canvass strapping by the piece.

#### Shuttles.

303. These have been discussed in the chapter on weaving. Sample shuttle should invariably be furnished by the purchaser before the looms are made. Shuttles for heavy canvass, carpets, etc. cost more than those for common cloths. It is useless to get any but the very best that can be found. They have to stand hard usage, both in the loom and at the hands of the operatives.

#### Temples.

304. Usually the manufacturer of temples can give good advice as to the special form of temple to use for each particular kind of cloth to be woven. It is a subject that has not been given sufficient attention except by temple manufacturers; but it is of great importance to have temples not only to fit the loom perfectly, but to suit the cloth.

The temple is shown in position on the loom in Fig 49. The heel R should be long enough to reach well down on the lay, and it should be set just far enough forward to strike the lay, or the strip of leather on the lay at a time when the temple roll is about 1-64 inch from the reed.

The temple should be examined to see that these adjustments are possible for the case in hand.

A great mistake is to order temples with rolls too short.

This is frequently done to save in the first cost, but it will lose in the character of cloth woven. For common sheetings and print cloths up to 28 inches wide, a roll 2 inches long will answer. For the same goods up to 40 inches wide, a roll  $2\frac{1}{2}$  to  $2\frac{3}{4}$  inches long should be used. Heavier or wider goods require longer rolls, or special forms of temples.

305. Great care is necessary in making specifications for reeds. The number of dents per inch must be calculated for the kind of cloth to be woven. There can be no fixed rule for this, on account of the numerous conditions to be fulfilled. But the general principles will be discussed.

306. Two warps ends (in special cases 3 to 8) are usually drawn in one dent of reed. This means that there must be half as many dents in reed as there are ends in the warp yarn; or, what is the same thing, half as many dents per inch as there are ends per inch in the warp yarn. This is not the same as ends per inch in the warp of the woven cloth, because of the fact that the cloth is narrower than the sheet of warp from which it is woven. The process of weaving contracts the cloth. This contraction varies with the character of cloth, and the tension with which it is woven-both in warp and filling. It varies from 5 to 15 per cent. For common sheetings, a fair average is about 8 per cent. If sheeting is to weave 36 inches wide, the warp yarn should be spread in the reed about 39 inches. Suppose the cloth is to contain 60 warp ends per inch. Not counting the extra ends for selvage, the number of warp ends in the whole width of cloth will be 36 x 60=2160. If 2160 ends are drawn through the reed. two in a dent, for a space of 39 inches, there mill be 1080 dents in 39 inches or (1080:39=) about 28 per inch, and so the reed must be ordered with 28 dents per inch. But it ought to be ordered longer than 39 inches, because the reed forms a guide for the shuttle in its passage through the shed, and the longer the reed, the better it acts as a guide. It is a very good plan to order the reed as long as the reed space in the loom. In addition to forming the guide, it allows a chance for weaving goods somewhat wider than that for which reed is at first ordered.

The reed space is generally 6 to 7 inches longer than the rated size of the loom. Thus a 36-inch loom has reed space 42 to 43 inches long.

COUNTS

307. In making the order for reeds, according to the above calculation, it might be specified as a 28 dent reed, 43 inches long; or as a reed with (28 x 43=) 1204 dents "spread" on 43 inches. The width of reed over all (4 to 4½ inches) should also be specified. It is also well to state in the specifications what cloth is intended to be woven with the reed. This gives the reed maker a chance to correct any error that might be made by the purchaser.

308. For the purpose of producing the cloth at (an infinitesimal) shaller cost it is the practice of some mills to steal a few warp ends per inch, that is, weave it with less ends per inch than the specificatitons demand. For example, instead of weaving the cloth above mentioned with 2160 ends in 36 inches, it will be calculated to contain say 2100, and the reed accordingly made coarser, say 1150 spread on 43 inches. This is 26.7 dents per inch, and is irregular. These fractional count reeds are called "bastard reeds." But after all the calculating on reeds, if the weaver does not maintain uniform conditions of tension, etc., the cloth will not count as desired. It is possible for the weaver to take warp that is drawn in 39 inches wide in reed, and make cloth anywhere from 34 to 38 inches wide.

(Continued next Week)

## A Contest for Economy is Constant, never ending!

Survival and a Profit require that it be waged by every business concern.

In manufacturing plants

## **Belting Equipment**

is the

## Effective Weapon

In solving a power problem the Acid Test is

## "Does It Pay?"

A trial will prove the economy of

## "Akron" Leather Belting

**Order Today** 

## The Akron Belting Company

Akron, Ohio

Representatives:

Central District L. L. HASKINS P. O. Box 241 Greenville, S. C. Southern District M. H. WHATLEY 1600 10th Ave. Birmingham, Ala.

U. S. A.



Capacities from 3 G. P. M. to 500 G. P. M. hand or power operated.

284 Peachtree St...
Atlanta, Ga.
109 Title Bldg...
Baltimore, Md.
128 Old South Bldg...
Soston, Mass.
12 W. Chippewa St.
Ruffalo, N. Y.
108 So. Dearborn St.
Chicago, Ill.
347 Book Bldg...

Chicago, Ill.
347 Book Bldg.,
Detroit. Mich.
108 Austin St.,
Houston, Texas
1025 Boulevard

District Offices

Indianapolia, Ind.
1505 Commerce Bidg.,
Kansas City. Mo.
1320 Starks Bidg.,
Louisville, Ky.
429 Broadway.
Milwaukee. Wis.
549 Plymouth Bidg.,
Minneanolis, Minn.
306 Wells Fargo Bidg.,
New Orleans, La.
71 Murray St.,
New York, N. Y.
904 Real Estate Trust.
8, Bidg.,

Philadelphia, Pa.
711 Ferguson Bidg..
Pittsburgh. Pa.
1516 Pine St..
St. Louis, Mo.
693 Mission St..
San Francisco. Calif.
Stearns-Rogers Manufacturing Company,
Denver, Colo.
Canadian Branch.
London Concrete Ma-

ments.

There's one to

fit your require-

BLACKMER PUMP COMPANY
GRAND RAPIDS (FORMERLY PETOSKEY) MICH.

# Do Your BEAM HEADS Ever Strike?

No! But if made of cast iron they often hold up production by breaking at just the wrong time. Use Frank Mossberg Corp. Beam Heads. Made of special "drawn" steel. Guaranteed not to break, bend or warp. Perfect yarn tension always.

#### FRANK MOSSBERG CORP.

Lamb Street

Attleboro, Mass.

ORIGINATORS OF STEEL BEAM HEADS LOOM—SECTION—ADJUSTABLE—TOPBEAM HEADS

Southern Representative, G. G. Slaughter, Charlotte, N. C.

## For Sale

150 Stafford Looms, 20 Harness Dobbies, shuttle change.

100 finishing 45-inch goods.

50 finishing 42-inch goods.

Operated only two and one-half years.

Built primarily for dress goods. Equipped for three beams. Have been run on silk and rayon warps and filling. Can be shipped promptly.

Write

## Southern Textile Machinery Company

Greenville, S. C.

or

Frank W. Gurry

Commercial Bank Bldg.

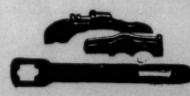
Charlotte, N. C.

#### Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

	Page	Pa	ge
-A-	OF	-K-	
Allis-Chalmers Mfg Co.	20	Kaumagraph Co. Keever Starch Co.	8
Akron Belting Co. Allis-Chalmers Mfg. Co. Aluminum Company of America American Cellulose & Chemical Mf	g. 11	Kilpstein, A. & Co.	-
American Celulose & Chemical Mic Co., Ltd.  American Moistening Co.  American Schaeffer & Budenberg Cor American Textile Banding Co.  Amory, Browne & Co.  Arabol Mfg. Co.  Arabol Mfg. Co.  Ashworth Bros.  Associated Business Papers, Inc.  Atlanta Brush Co.	- 21	Ladew, Edward R. Co. Lane, W. T. & Bros. Langley, W. H. & Co. Leslie, Evans & Co. Lestershire Spool & Mfg. Co. Link-Belt Co. Link-Belt Co.	-
American Schaeffer & Budenberg Cor	p. —	Langley, W. H. & Co.	28
American Textile Banding Co.	35	Leslie, Evans & Co.	28
Arabol Mfg. Co.		Lestershire Spool & Mfg. Co.	20
Arnold, Hoffman & Co.	- 2		
Associated Business Papers, Inc.	01	Lowell Shuttle Co.	22
Atlanta Brush Co. Atlanta Harness & Reed Mfg. Co.		Macrodi Fibre Co	
		Marston, Jno. P. Co.	29
Rahnson Co	1	Mauney Steel Co.	-
Bancroft, Jos. & Co.		Memphis Cotton	31
Barber-Colman Co.	29	Merrow Machine Co.	20
Billington, James H. Co.		Morse Chain Co.	35
Blackmer Rotary Pump Co.	25	Mossberg, Frank Corp.	26
Bahnson Co. Fancroft, Jos. & Co. Barber-Coiman Co. Barber Mfg. Co. Billington, James H. Co. Biackmer Rotary Pump Co. Bond, Chas. Co. Bosson & Lane		Macrodi Fibre Co. Marston, Ino. P. Co. Mauney Steel Co. Mathieson Alkali Works Memphis Cotton Merrow Machine Co. Moreland Sizing Co. Morse Chain Co. Mossberg, Frank Corp. Mossberg Pressed Steel Corp.	
Bond, Chas. Co. Bosson & Lane Bradley, A. J. Mfg. Co. Broadway Central Hotel Brown, David Co. Butterworth, H. W. & Sons Co.	- 07	National Aniline & Chemical Co.	-
Brown David Co.	22	National Oil Products Co.	16
Butterworth, H. W. & Sons Co		National Ring Traveler Co	29
-c-		Newburger Cotton Co.	31
Carrier Engineering Corp.	- 20	Newport Chemical Works, Inc.	_
Catlin & Co. Charlotte Leather Belting Co.	23	North Carolina Cotton	31
Catlin & Co. Charlotte Leather Belting Co. Charlotte Manufacturing Co. Chicago Belting Co. Cocker Machine & Foundry Co. Collins Bros. Machine Co. Cooper-Hewitt Electric Co. Corn Products Refining Co. Courtney, Dana S. Co. Crompton & Knowles Loom Works Crump, F. M. & Co. Curran & Barry Curtis & Marble Co.		National King Traveler Co.  Neutrasol Products Corp.  Newburger Cotton Co.  Newport Chemical Works, Inc.  N. Y. & N. J. Lubricant Co.  North Carolina Cotton  Norwood Engineering Co.	27
Cocker Machine & Foundry Co.			
Collins Bros. Machine Co.		Page-Madden Co.	27
Cooper-Hewitt Electric Co.		Page Fence & Wire Products Assn Fage-Madden Co. Parker, Walter L. Co. Parks-Cramer Co. Penick & Ford, Ltd. Puro Sanitary Drinking Fountain Co.	24
Courtney, Dana S. Co.	19	Penick & Ford, Ltd.	_
Crompton & Knowles Loom Works		Puro Sanitary Drinking Fountain Co.	2
Curran & Barry	28	—R—	
Curtis & Marble Co.	22	Reeves Brothers, Inc. Rex Engineering Corp. Roessler & Hasslacher Chemical Co.	40
		Roessler & Hasslacher Chemical Co	-
Dary Ring Tarveler Co.	=	R. I. Warp Stop Equipment Co. Rice Dobby Chain Co.	27
Deering. Milliken & Co., Inc.	28	Rokers Fibre Co.	-
Dary Ring Tarveler Co. Davidson, Jos. L. Co. Deering, Milliken & Co., Inc. Denison Mfg. Co. Detroit Graphite Co. Divor Labricating Saddle Co.	23	Root Co. Roy, B. S. & Son	-
Dixon Lubricating Saddle Co.	26	-8-	
Dixon Crucible Co. Joseph	Accessed."	Saco-Lowell Shops Scott, Henry L. & Co.	-
Drake Corp. Draper, E. S. Draper Corp. DraperGold Bross	20	Scott, Henry L. & Co.	-
Draper Corp.	1	Sellers, Wm. & Co.	_
Dronsfield Bros. Druid Oak Belting Co. Dunning & Boschert Press Co., Inc. Duplan Silk Corp. DuPont de Nemours, E. I. & Co.	21	Seaboard Ry. Sealbard Ry. Sellers, Wm. & Co. Seydel Chemical Co. Seydel-Woolley Co. Southern Textile Machinery Shand Engineering & Sales Co. Siggers & Siggers	-
Dunning & Boschert Press Co., Inc.	21	Southern Textile Machinery	26
Duplan Silk Corp.	7	Shand Engineering & Sales Co.	_
—E—		Siggers & Siggers Sirrine, J. E. & Co. Slaughter, G. G. Smith, Malcolm & Co., Inc. Sonneborn, L. Sons Sonoco Products Southern Ry.	23
Eaton, Paul B.	23	Slaughter, G. G.	36
Eaton, Paul B. Eclipse Textile Devices, Inc. Economy Baler Co. Emmons Loom Harness Co. Eatonton Cotton Mills Entwistle, T. C. Co.	14	Sonneborn, L. Sons	_
Emmons Loom Harness Co.	31	Sonoco Products	-
Eatonton Cotton Mills	21	Southern Ry. Southern Spindle & Flyer Co. Spray Painting & Finishing Equipment Sales Co. Stafford Co.	_
Entwistle, T. C. Co.	-	Spray Painting & Finishing Equip-	
Fales & Jenks Machine Co.		ment Sales Co.	36
Fales & Jenks Machine Co. Ford, J. B. Co. Farish Co. Fournier & Lemoine	23	Steel Heddle Mig. Co.	_
Fournier & Lemoine	20	Stein, Hall & Co. Sydnor Pump & Well Co.	91
Frakiin Process Co.	- married		
Carland Miss Co	90	Terrell Machine Co. Textile Finishing Machinery Textile Mill Supply Co. Thomas Grate Bar Co. Tolhurst Machine Works Tripod Paint Co. United Chemical Products Co.	_
Gastonia Brush Co.	9	Textile Finishing Machinery	-
Gastonia Brush Co. General Dyestuff Corp. General Electric Co. Georgia Webbing & Tape Co. Graton & Knight Mfg. Co.		Thomas Grate Bar Co.	_
Georgia Webbing & Tape Co.	22	Tripod Paint Co	19
Graton & Knight Mfg. Co.	17	_U_	
Hart Products Corp.	13	United Chemical Products Co.	35
H. & B. American Machine Co	10	Universal Winding Co.	30
Honedale Mfg Co		U. S. Ring Traveler Co. Universal Winding Co. Victor Ring Traveler Co. Vogel, Joseph A. Co.	9.4
Houghton, E. F. & Co.	15	Vogel, Joseph A. Co.	2
Hart Products Corp. H. & B. American Machine Co. Hollingsworth, J. D. Hopedale Mfg. Co. Houghton, E. F. & Co. Howard Bros. Mfg. Co. Howard-Hickory Co. Hunt, Rodney, Machine Co. Hyatt Roller Bearing Co.			
Hunt, Rodney, Machine Co.	21	Washburn Watts, Ridley & Co.	-
Hyatt Roller Bearing Co.		Wellington, Sears & Co.	28
Imperial Rayon Co.	22	Whitinsville Spinning Bing Co	22
Industrial Fibre Co. International Salt Co., Inc.		Williams, J. H. Co.	-
International Sait Co., Inc.		Wilts Veneer Co.	23
Jacobs, E. H. & Co. Jordan Mfg. Co.	30	Woods, T. B. Co.	_
Jordan Mig. Co.	7	Washburn Watts, Ridley & Co. Wellington, Sears & Co. Whitin Machine Works Whitinsville Spinning Ring Co. Williams, J. H. Co. Wilts Veneer Co. Wolf, Jacques & Co. Woods, T. B. Co. Woodward, Baldwin & Co.	28

#### DIXON LUBRICATING SADDLE CO.



Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles. Stirrups and Levers.

WRITE FOR SAMPLES BRISTOL, RHODE ISLAND

#### Look Over Your Spindles Now And Be Prepared



Get 8 to 10% more yarn on your bobbins by equipping your spindles with our Patented Clutch.

Don't run your spindles with worn out whorls cut in by bands, which changes the speed of your spindles, therefore making uneven yarn. Let us change

Let us change your whorls on spindles, repoint and restraighten same, and save you money.

Fournier & Lemoine Linwood, Mass.

Improved Dobby Chain

Marian Company of the Company of the

Dobby Cords

Rice Dobby Chain Co.
Millbury, Mass.
Send Us Your Order Today

MAKE YOUR WANTS KNOWN

Through The

Bulletin Want Department Read in More than 95% of the

Southern Textile Mills
Rate: \$1.50 per inch per insertion

## Becky Ann's Books

Interesting Stories of Cotton Mill Life

"A Man Without a Friend"

"Only a Factory Boy"
"Hearts of Gold"
"The Better Way"

Price \$1.00 Each

Order from CLARK PUBLISHING CO. Charlotte, N. C.

#### Rayon's Future in Fashion

(Continued from Page 8)

there will be improvement in quality, infinitely greater interest in ornament and an emphasis on incident and nuance, rather than on "difference."

We will never accomplish such an end through mere wishing; we will never reach such a goal through use or non-use of any fibre or fibres. The beginning of better things will be a willingness to recognize beauty as a marketable product and a realization that beauty is a matter of tradition and interpretations plus intelligent experiments and selection. There must be laboratories of design and style as well as of chemistry; what to make is of equal importance as how to make it.

Rayon will play an important part in this development; it is the added pigment in the palette. But it awaits with all other fibres the recognition on the part of mill owners that the reason which impels the public to accept or reject a fabric is of first importance and technical equipment and mill convenience of second.

#### Lancashire Cotton Trade During 1925

(Continued from Page 6)

crop was not realized until the end of the year, but it began to be surmised during October, and throughout the twelve months the trade has suffered from the long-drawn-out decline in prices. Every attempt at buying has been nipped by a renewal of decline, until by December the demand from most quarters seemed to close down entirely to enable the full depths of the price depression to be plumbed.

At the same time a serious problem arose out of the depreciation in the value of stocks, whether in the form of raw cotton, yarn, or cloth. The cancellation of contracts, however, has been more prevalent on other occasions in the past.

On February 16 the working week was reduced from 391/4 hours to 35 By June it became obvious that the federation's short-time policy was not being observed, but an extension of the schedule to 3914 hours seemed to save the situation. This regime has been continued since then, although it is doubtful whether the output is being ab-sorbed and although it is clear that spinners are once more disposing of their product at a loss. Owing to the restriction of demand manufacturers and shippers are also working on narrow or non-existent margins, but it is obvious that as soon as the demand shows any determined signs of strength the prices of yarn and cloth in Manchester will rise sharply.—Manchester Guardian.

#### Wanted

A position as master mechanic. Twelve years experience. Can give good references. Address "Master Mechanic" care Southern Textile Bulletin.

#### THE SUPERIOR PORCELAIN



# Textile Machinery

manufactured by



## Page-Madden Co.

Incorporated 128-34 Sumpter St. Brooklyn, N. Y.

Samples and Catalog upon Request

## **NORWOOD**

## Mechanical Filtration

Gravity or Pressure Types
Clean, Clear Water Guaranteed

## Norwood Engineering Co.

Florence, Mass., U. S. A.

Chas. M. Setzer, Sou. Rep., Charlotte, N. C.

## **Broadway Central Hotel**

667-677 Broadway, New York

Accommodations for 1000 guests.

In the heart of the down-town business section.

Connections to all parts of the City within a few minutes from our door.

#### Newly Furnished and Renovated

High class service at low rates. Large Banquet and Convention Halls.

Arrange for Your Conventions At Our Hotel



## Ring Traveler Specialists U. S. Ring Traveler Co.

159 Aborn Street, PROVIDENCE, R. I.

ANTONIO SPENCER, President AMOS M. BOWEN, Treasurer WM. F. VAUGHAN, Southern Representative P. O. Box 792 GREENVILLE, S. C.

U. S. Ring Travelers are uniformly tempered which insures even-running spinning. They are also correct as to weight and circles. Quality guaranteed.



## Deering, Milliken & Co., Inc.

79-83 Leonard Street New York

99 Chauncy St., Boston

223 Jackson Blvd., Chicago

## Leslie, Evans & Company

64 Leonard Street

New York

Selling Agents for Southern Mills Sheetings, Print Cloth, Drills, Twills, Ducks

#### W. H. LANGLEY & CO.

57 Worth St.

COMMISSION MERCHANTS

New York

Sole Selling Agents For Langley Mills, Seminole Mills, Aiken Mills, Anderson Cotton Mills, Strickland Cotton Mills, Moultrie Cotton Mills, Poulan Cotton Mills, Royal Cotton Mills

#### WOODWARD, BALDWIN & CO.

43 and 45 Worth Street, New York Selling Agents fo

Southern Cotton Mills

Philadelphia Boston San Francisco Chicago Cincinnati

St. Joseph Shanghai (China) Minneapolis

## Wellington, Sears & Company

93 Franklin St., Boston

66 Worth St., New York

Philadelphia

Chicago New Orleans

Dallas St. Louis San Francisco

## Amory, Browne & Co.

Specializing in Selling Cotton Mill Products 62 Worth St., NEW YORK BOSTON, 48 Franklin St.

Our Export Department Serves 69 Foreign Countries

## CURRAN & BARRY

320 Broadway

New York, N. Y.

#### REEVES BROTHERS, INC.

55 Leonard Street, New York
Philadelphia office: Drexel Building New England office: Middleton, Conn.

Philadelphia office: Drexel Building New England ornce: Middleton, Collin. Selling Agents for the following Mills:

Cotton Yarns, Combed Peeler, Carded Singles and Ply, Audrey Spinning Co, Weldon, N. C., Mandeville Mills, Carrollton, Ga., Mills Mill, No. 2, Woodruff, S. C., Wabena Mills, Lexington, N. C., White Hall Yarn Mills, White Hall, Ga. Grey Goods, Print Cloths, Twills, Shectings, Pajama Checks, Arcadia Mills, Spartanburg, S. C., Clinton Cotton Mills, Clinton, S. C., Hermitage Cotton Mills, Camden, S. C., Mills Mill, Greenville, S. C., Osage Mfg. Co., Bessemer City, N. C.

## Cotton Goods

New York. - The cotton goods markets were quiet last week and trading was less active than during the several preceding weeks. The unsettled conditions, followed by lower cotton prices resulted in reductions on print cloths and sheetings and some of the other lines. Print cloths declined from 1/8 to 1/4 cents a yard, bleached cottons were a quarter to a half cent lower, while some lines of denims were reported sold at concessions of 1 cent under former prices. Goods that were in moderate demand were held to full prices, but wherever the demand was slow, a decline was reported.

Prices in the print cloth division showed a good deal of irregularity, different mills quoting various prices on the same constructions. The best demand was for 64x60s for delivery in April, May and June. prices on this business being reported at 8 cents. April-May-June 68x-72s were offered at 91/2 cents, with sales made of April-May at 9% cents. A few more March 80 squares sold at 121/2 cents and a fair quantity of Aprils at 121/4 cents. The East quoted 12½ cents for April. A number of buyers bid 7 cents for 60x48s, with reports that 7½ cents was the best for the April-May-June position. A few contract 6.40-yard sold at 71/4 cents. A fair amount of spot 8.20 yard were taken at 5%c and a few at 5½ cents. The 7.15 yard held nominal at 6½ cents for March. March 6.60-yard held at 7 cents.

Sheetings were better than print cloths. Goods for prompt delivery were scarce and continued to demand a premium. Where goods were wanted for future delivery, they reflected something of the general market weakness. For 31-inch 5.00 yard, 7½, net, has been the market; 6¼ for 44x40, 6.15 yard, and one-eighth for the 40 squares cunt; 7%, net, for spot of 5.50 yard, which are scarce; 7¼; net, for nearby and contract at less. For 4.70 yard, 8%, net, is the market for April; 37inch, 48 squares, 4.00 yard quoted at 9¼, net, spot, with contract price at slightly less. For 40inch, 3.60 yard, 11%, net, was paid.

The market for warp stripe sateens continued generally quiet, although there were some fairly large sales reported on Friday and Saturday. Sales of warp sateens combed stripe 140x76s and 140x72s at 17% cents, with contracts possible at 17% cents. The market on carded 110x68s held at 141/2 cents April and no spots to be found. The 88x48s continued 10½ cents East and 101/4 cents South, deliveries

commencing late March. Scrims in the 50x42s count of 30s yarns sold at 111/2 cents. A few specialties were inquired for.

The tire companies have already purchased a good part of their fab-ric requirements through the sec-ond quarter of the year and there was only a moderate amount of interest during the past week. Cotton duck was quiet, with prices showing a tendency to decline. Quotations on hose and belting duck, army duck and enameling duck were slightly lower than during the pre-

There were a number of fair sales of carded 90x60s broadcloths at 11% cents for spots, 100x60s at 12¼ cents and 100x64s at 12½ cents. Sales included combed broadcloths at 18% for choice makes of 128x68s. The nominal market on 112x68s was 14 cents and 22 cents for combed

The buying in the Fall River print cloth market during the week was slow. The estimate is that less than 40,000 pieces were sold, covering a variety of goods. It was especially noted that 36-inch low counts were somewhat quiet, with interest centered mostly in narrow and wide print cloth numbers with sateens included.

In the narrow goods the most desired constructions were 25-inch, 40x32, 14.75, at 3, and 52x44, 11.00 at 4. Trading was in small quantities with spot goods desired.

There was some demand for 27inch styles fair-sized quantities of 27-inch, 44 square 9.50, being reported at 4%, and 56x52, 9.00 at 5%.

Buyers evinced some interest in wide looms with sales reported of 381/2-inch, 40 square, 8.70, at 5%, and 44x40, 8.20 at the same figure. Fairsized sales of 38½-inch, 60x40, 6.25, were reported at 7%, and 64x60, 5.35, at 8%, and a few reported.

Cotton goods prices were quoted

Print cloths, 28-in., 64x64s	61/4
Print cloths, 28-in., 64x64s	6
Print cloths, 28-in., 64x60s	5%
Gray g'ds, 38½-in., 64x64s.	8%
Gray goods, 39in., 68x72s.	934
Gray goods, 39-in., 80x80s	121/2
Brown sheetings, 3-yard	12%
Brown sheetings, 4-yard	10%
Brown sheetings, standard	13%
Ticking, 8-oz.	22
Denims	171/2
Staple ginghams, 27-in.	9
Kid finished cambrics 81/2	a91/2
Dress ginghams131/2a	171/2
Standard prints	91/2

Southeastern Selling Agency

#### LESSER-GOLDMAN COTTON COMPANY

OF ST. LOUIS, MO.
P. H. PARTRIDGE, Agent, Charlotte, N. C.
Extra staples, and good 1 1-16 and 1½ cotton from Arkansas,
Oklahoma, and Texas, and Memphis territory.

## The Yarn Market

Philadelphia, Pa.-It was a very slow week in the cotton yarn market. Buyers were not in the market except to cover their most immediate needs, taking only the minimum quantities that would fill their requirements. The prices situation was considerably unsettled and quotations were generally lower throughout the list. The weaker cotton market and the generally unsettled conditions combined to prevent anything like an active busi-Prices were irregular on many numbers and the reductions named were not uniform. Lower prices, howere, failed to stimulate the demand. Buying was restricted to small lots and and sales were generally consumated only after considerable price haggling. Buyers contend that prices are not yet low enough, while spinners state that buyers offers are below replacement costs.

In the South, it is reported that the mills have not yet run out of orders and that the majority of spinners still have enough business on hand to keep them busy for several weeks. Spinners prices have been lowered slightly, following the decline in cotton, but are still well above prices quoted in this market. Dealers lowered prices in two-ply carded weaving yarns, putting them about a cent lower than prices a week ago. Single carded skeins and warps were reduced, but reduction was not uniform and the same counts reflected much irregularity in price. Some of the coarser counts of single carded weaving yarns were reported a cent and a half lower in this market.

Combed yarns were quiet, there being little business beyond a few sales made on a spot basis.

Prices here were published as follows, but were generally lower than most spinners would accept:

	Southern Two-Ply Chain	Warps.
88		33168
108		
168		36½a
208		37 a371/6
248		401/4a
26s		411/a421/a
308		
408		53 a54
40s	ex	59 a61
508		67 a69
	Southern Two-Ply Ske	ins.
88		33½a
108		
128		34162
148		35 a
16s		
208		36168
248		
268		
308		
368		
40s		5214.25314
408	ex.	
50s		
60s		70 a71
	ged Carpet 3 and 4-ply	v_28 a29
	ite Carpet8 and 4-pl	
	Part Insulated Waste	
08	, 1-ply	27½a

Tinged Carpet 3 and 4-p White Carpet 8 and 4-p	1y_28 a29 ly_32 a32½
Part Insulated Waste	Yarns.
6s, 1-ply 8s, 2, 3 and 4-ply 10s, 1-ply and 3-ply 12s, 2-ply 16s, 2-ply 20s, 2-ply 26s, 2-ply 30s, 2-ply	30 a
Duck Yarns-3, 4 and	5-Ply.
8s 10s	33 a 34 a

12s 16s		
208		37 a3732
	Southern Single Chain	Warps
108		
128	ALM TO SERVE TO SERVE TO SERVE THE S	
148		
16s		
20s		
24s		
26a		
308		43 a.43 ½
40s		53 a_
	Southern Single Sk	nins.
6н		33 a
88		331/2a
10s		
128		
128		
		35½a
148 168 20s		35½a 36½a 38 a
14s 16s		35½a 36½a 38 a
148 168 20s 228 24s		35½a 36½a 38 a 39 a
148 168 20s 228		35 ½ a 36½ a 38 a 39 a 39½ a 40½ a
148 168 20s 228 24s		35 ½ a 36½ a 38 a 39 a 39½ a 40½ a
148 168 20s 228 248 268		35½a 36½a 38 a 39 a 39½a 40½a 43 a43½
148 168 20s 228 248 268		35½a 36½a 38 a 39 a 39½a 40½a 43 a43½

8	331/48
	34 8
8	341/28
8	35 E
8	36 8
8	361/48
8	27 .
F	28 .
8	39 8
8	401/28
н Ф	29 5
8	41
8	50 .
*Tying in.	

253		Two-P	ly.		
168				52	a
20s				55	8
30s				62	a
368				68	a72
40s				70	a75
50s				80	a
60s				84	a88
70s				95	a1 (
808				1 1	0a1 1
	Southern	Combed	Peeler	Cone	8.
10s				43	a

 43 a
 44 a
 45 a
46 a
 47 a
 48 a
 52 a
 52½a
53 a
56 a
 58 a
 68 a
 78 a
8Z a8t
 1 10a_

49
 40
 50
 54
 61
 68
79
Carded Cones.
 40
 42

## Hartsell Mills.

The state of the s	
W. N. Pharr	Supt.
L. W. Radford	Carder
J. T. Howell	Spinner
W. A. Buff	Weaver
W. A. Buff	Cloth Room
N. H. Radford M.	aster Mechanic

## CATLIN & COMPANY

NEW YORK

BOSTON

PHILADELPHIA

CHICAGO

Commission Merchants

Cotton Cloth and Cotton Yarn

SOUTHERN OFFICE

910-11 Commercial Bank Bldg.

CHARLOTTE, N. C.

## WENTWORTH Double Duty Travelers

Last Longer, Make Stronger Yarn, un Clear, Preserve the SPINNING ING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the National Ring Traveler Co.

Providence, R. I. 31 W. First Street, Charlotte, N. C.





BARBER-COLMAN COMPANY
GENERAL OFFICES AND PLANT
ROCKFORD, ILL. U.S.A. GREENVILLE , S.C. FRAMINGHAM , MASS. WARP TYING MACHINES HAND KNOTTERS WARP DRAWING MACHINES AUTOMATIC SPOOLERS HIGH SPEED WARPERS

### What are the Factors of a Good Size?

This question is asked daily by the aggressive mill superintendent.

**OUR ANSWER IS** 

A Good Starch, A Pure Tallow, and GUM TRAGASOL.

WHY?

The Starch for weight—the Tallow for lubrication—and Gum Tragasol to bind fibre and increase tensile strength of the yarn.

No Shedding Maximum Production Better Cloth

John P. Marston Company Boston

## Want Department

Cost Accountant

Competent cost accountant and auditor desires position with large cotton mill where there is an opportunity to grow. Excellent references. Address "Cost Accountant," care Southern Textile Bulletin tile Bulletin.

For Sale

One three-ton De Loach Ice
Plant complete. Only used short
while. In A-1 condition. Reason
for selling, increased capacity.
The very outfit for small town or
isolated hotel. Cheap to quick
purchaser. Box P, Rockingham,
N. C.

#### Thos. J. Clark

Any one knowing the whereabouts of Thomas J. Clark, age 35, fair complexion, blue eyes and dark hair, height 5 feet 10-inches. Weight about 145 pounds, will please tell him to come home as there is nothing against him, or compunicate with his wife. communicate with his wife s. Nannie Clark, 96 Ave, "G" Mrs. Nannie Clark E. Thomaston, Ga.

#### Superintendent Wanted

A young man as superintendent of mill, weaving artificial silk novelties. Must have good knowledge of weaving fancies, experience with labor, etc. Answer "C" care Southern Textile Bulletin, giving education and what positions held in last ten years and reason for leaving each.

#### We Have for Sale

We Have for Sale

16 Fales & Jenks Spinning
Frames, 256 Spindles.

8 Fales & Jenks Spinning
Frames, 272 Spindles.

Bought in 1908 and now running, in good condition, can be purchased at a bargain.

Band drive, 2½" gauge, 1% ring and cast iron Holder, 49D spindles, 6" traverse Houghton Metallic Thread Boards.

Can be seen running in March.

Standard-Coosa-Thatcher Co. Piedmont, Ala.

For Sale
300 Crompton & Knowles 2x1 Box
Looms 371/2" between swords. Looms 374" between swords. Good mechanical condition, operating every day. We invite inspection.

Cliffside Mills, Cliffside, N. C.

#### For Sale

Seven 100 spindle each Foster No. 12 Nutaper cone winders. All in first class condition in every way. Will de excellent work. An exceptional buy for any mill needing. Complete information and prices on application. The Russell Manufacturing Co., Alexander City. Ala. City, Ala.

Help Wanted
Experienced Union Special Sewing Machine Fixer. Young married man preferred. Must have common school education and ability for promotion. Give references and salary expected. Address "M D M Georgia", care Southern Bulletin.

#### Samples and Samples

Victor Ring Travelers are all the name implies—the finest travelers humanly possible to produce. From the raw wire to the finished goods, at each step Victors pass through the hands of experts—assisted by the most scientific mechanical equipment. If you could witness the making of Victors, you would readily understand why they are "Victors of them all."

You can try them out any time you wish. Simply send a postal card for FREE SAMPLES.

VICTOR RING TRAVELER COMPANY

20 Mathewson St.

Providence, R. I.

Southern Agent A. B. CARTER

515 Third National Bank Bldg. Gastonia, N. C.

"A Man Without a Friend" "The Better Way" "Only a Factory Boy" "Hearts of Gold"

BY BECKY ANN (Mrs. Ethel Thomas)

PRICE \$1.00

An Interesting Story of Cotton Mill Life

For Sale by Clark Publishing Company, Charlotte, N. C.

## UNIVERSAL WINDING CO. BOSTON

## Textile Winding Machinery

Southern Offices

Charlotte, N. C. Frederick Jackson I. E. Wynne

Atlanta, Ga.

Jesse W. Stribling

Factory Office, Providence, R. I.







## Seydel-Woolley Co.

Textile Chemicals for Best Weaving

Seyco Products

The result of twenty years' study and practice in treatment of Sizing and finishing problems.

Main Office and Plant, 35 Glenn St., Atlanta, Ga.

## EMPLOYMENT BUREAU

The fee for joining our employment bureau for three months is \$2.00, which will also cover the cost of carrying a small advertisement for two weeks.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment

bureau the above fee is only \$1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires and carry small advertisement for two weeks.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern Textile Industry.

WANT position as overseer carding or spinning or both. Have had 15 years experience as overseer and can give good references. No. 4769.

WANT position as roller coverer and belt belt man. Can give first class service in every respect. Good references. No. 4770.

WANT position as overseer weaving. Experienced on wide variety of fabrics and can handle weave room in efficient manner. Excellent references. No. 4771.

WANT position as overseer slasher room.
Thoroughly understand slashing and have had long experience in a number of good mills. Good references. No. 4772.

WANT position as superintendent. Practical reliable man of good character and excellent training and experiene. Now employed. No. 4773.

WANT position as overseer dyeing de-partment. Now handling large job in satisfactory manner, but have good reasons for making a change. Quali-fied to handle dye plant in first class manner. Would like to correspond with mill needing high class man. No. 4774.

WANT position as superintendent of medium sized mill or overseer spinning in larger. mill. Long experience in spinning and can get excellent results. Good references. No. 4775.

WANT position as overseer weaving. Now employed in good mill, but wish better place. Practical experienced weaver who can handle a wide range of goods. Good references. No. 4777.

WANT position as overseer carding, as-sistant superintendent or office man. Age 29, graduate Georgia Tech textile department, experienced in every de-partment of mill. Good references as to character and ability. No. 4718.

WANT position as master mechanic or electrician. Experienced on both steam and electric drive and thoroughly understand mill machine work. Good references. No. 4779.

WANT position as overseer carding. Long experience in card room as both overseer and second hand and can give excellent references from present and past employers. No. 4780.

WANT position as overseer spinning or weaving. Twenty years practical ex-perience. Seven years as overseer cloth departments. Textile graduate. Age

WANT position as overseer cloth room. Experienced on many cloth construc-tions and can give references to show excellent past record. No. 4782.

WANT position as overseer carding. Have good place now, but am qualified to handle larger room. Long practical experience, good manager of help. First class references. No. 4783.

WANT position as master mechanic. 18 years experience as master mechanic. Can handle steam or electric power. Strictly sober. Can give good references. Now employed, but can come on short notice. No. 4784.

WANT position as superintendent yarn mill. Married, age 40. Practical man experienced on combed and carded colored and white yarns. Ran last job 11 years. Can get quality and quantity at reasonable cost. Good references. No. 4785.

WANT position as overseer carding or carding and spinning. Reliable man of good character, experienced as both carder and spinner. Best of references. No. 4786.

WANT position as overseer weaving plain or fancy work. Long experience and get excellent results. References. No. 4787.

WANT position as overseer weaving or designer. Now employed as designer. Experienced on all kinds of fancy goods. Would like to correspond with fine goods mills needing competent man. No. 4778.

WANT position as weave room overseer in mill of 200 to 500 looms, preferably on sheetings, drills, print cloths, duck or colored chambray. 18 years experience in weaving, I. C. S. graduate. Experience covers wide range of goods in many mill. Good references. No. 4779.

WANT position as master mechanic. Ex-perienced on steam and electric drive, have had varied experience on big jobs. Licensed marine and stationary engi-neer. College man, will not consider small job. No. 4790.

WANT position as overseer carding. Good man with references and long ex-perience in card room. No. 4791.

WANT position as superintendent yarn or weave mill. Now employed as night superintendent. First class man who can get results. Best of references. No. 4792.

WANT position as superintendent any size mill, yarn or cloth. High class spinner and weaver, understand white and colored goods, plain and fancy. References. No. 4793.

WANT position as superintendent of yarn or twine mill. Now employed, but wish better place. Experienced and re-liable man who can give execellent ser-vice. No. 4794.

WANT position as superintendent, prefer North or South Carolina. Now employ-ed. Good references to show character and ability. No. 4796.

WANT position as overseer carding or spinning prefer Carolinas. Have run present job for 5 years and given satisfaction. Have had 14 years as overseer Good references. No. 4796.

WANT position as overseer weaving, Ex-perienced and reliable man who can handle weave room in efficient and eco-nomical manner. No. 4797.

WANT position as superintendent or carder and spinner. Qualified to handle either position. Best of references. No. 4798.

WANT position as overseer cloth room or small weave room on plain goods. Execricaced as weaver. Cloth room man and shipping clerk. Married, have family. Excellent references. No. 4799.

WANT position as carder or spinner or superintendent small mill. Now em-polyed. Can give first class references. No. 4800.

WANT position as carder or spinner or either. Long experience in number of mills. Best of references as to character and ability. No. 4801.

THOROUGHLY competent superintendent or assistant superintendent wants position. Would take assistant's place. Textile graduate, married, 20 years experience as superintendent on white and colored goods. Know cotton grading, dyeing and finishing. Best of references. Will come to Carolinas or Georgia on trial at own expense. No. 4802.



JOSEPH NEWBURGER, President D. W. BROOKS, Vice-President W. H. WILLEY, Vice-President NORMAN MONAGHAN, Secy-Treas.

## **NEWBURGER** COTTON CO.

MEMPHIS - TENN.

Mississippi Delta Cotton our Specialty



Postal Phone

Local Phone 821

Long Distance Phone 9983

S. B. TANNER, JR.

Cotton

CHARLOTTE, N. C

Representing NEWBURGER COTTON CO.

TARVER, STEEL & COMPANY Dallas, Texas

William and York Wilson Incorporated

Memphis, Tenn.

Cotton Brokers

Rock Hill, S. C.

Representing reliable shippers throughout the cotton belt.

W. J. BRITTON & CO. COTTON

RIVERS, BENDERS and STAPLE

105 S. Front St. Memphis, Tenn, U. S. A.

#### EMMONS LOOM HARNESS COMPANY

The Largest Manufacturers of Loom Harness and Reeds in America

Loom Harness and Reeds

Slasher and Striking Combs, Warps and Leice Reeds, Beamer and Dresser Hecks, Mending Eyes, Jacquard Heddles

LAWRENCE, MASS.

## CLASSIFIED LIST OF ADVERTISERS

Air Conditioners—
American Moistening Co.
The Bahnson Co.
Carrier Engineering Co.
Parks-Cramer Co. Albone—
Roessler & Hasslacher.
Architects and Mill Engineers—
Sirrine & Co., J. E. Ash Handling Equipment— Link-Belt Co. Automatic Feeds for Cotton— Saco-Lowell Shops, Whitin Machine Works. Automatic Lint Cleaners— T. C. Entwistle Co. Automatic Stop Motion— Eclipse Textile Devices, Inc. Automatic Yarn Cleaner— Eclipse Textile Devices, Inc. Bail Bearing— Charles Bond Company Fainir Bearing Co. Salers—
Dunning & Boschert Press Co., Inc.
Economy Baler Co.
Rex Engineering Corp. aling Presses—
Dunning & Boschert Press Co., Inc. Economy Baier Co.
Rex Engineering Corp. Sands and Tape— American Textile Banding Co. American Textile Banding Co.

Baskets—
Charles Bond Company
W. T. Lane & Bros.
Wickwire Spencer Steel Co.
Beaming and Warping Machinery—
Barber-Colman Co.
Cocker Machinery & Foundry Co.
Draper Corporation.
Easton & Burnham Machine Co.
T. C. Entwistle Co.
T. C. Entwistle Co.
Beam Heads—
T. C. Emtwistle Co.
Frank Mossberg Corp.
Mossberg Pressed Steel Corp.
Saco-Lowell Shops.
Beams (Section)— Frank Mossberg Corp.

Mossberg Pressed Steel Corp.
Saco-Lowell Shops.

Beams (Section)—
Washburn.

Beams (All Steel)—
T. C. Entwistle Co.
Frank Mossberg Corp.
Mossberg Pressed Steel Corp.
Saco-Lowell Shops.

Béaming Combs—
T. C. Entwistle Co.
Easton & Burnham Machine Co.
Easton & Burnham Machine Co.
Steel Heddle Mfg. Co.
Bearings (Roller)—
Charles Bond Company
Hyatt Roller Bearing Co.
Hyatt Roller Bearing Co.
William Sellers & Co., Inc.
Woods. T. B. & Sons Co.
Bearings (Textile Machinery)—
Charles Bond Company
Hyatt Roller Bearing Co.
Beit Conveyors—
Link Beit Co.
Wickwire Spencer Steel Co.
Beit Conveyors—
Link Beit Co.
Wickwire Spencer Steel Co.
Beit Tighteners—
Charles Bond Company
Link-Beit Co.
Wyods, T. B. & Sons Co.
Beiting—
The Akron Beiting Co.
Jas. H. Billington Co.
Jas. H. Billington Co.
Silp. Not Beiting Corp.
Graton & Knight Mfg. Co.
E. F. Houghton & Co.
Bilt Coment—
Charles Bond Company
Edward R. Ladew Co.
Beit Cressing—
Charles Bond Company
Edward R. Ladew Co.
Beit Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Self Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Self Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Self Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Self Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Self Cressing—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Selting (Link)—
Charles Bond Company
Link-Belt Co.
Selting (Link)—
Charles Bond Compan Beams (Section)—

Southern Artsilk Bleach & Dye Works,

Bleaching Materials—
Arabol Mfg. Co.
Arnold, Hoffman & Co., Inc.
L. Sonneborn Sons, Inc.
National Oil Products Co., Inc.
Bouson & Lane.
J. B. Ford Co.
Nr. Longal Aniline & Chemical Co.
United Chemical Products Co.
Wolf, Jacques & Co. Sobbin Holders—
Fournier & Lemoine.
Sobbins and Spools— Sobbins and Spools—
Jas. H. Billington Co.
David Brown Co.
Courtney, The Dana S. Co.
Draper Corporation.
Jordan Mfg. Co.
Lestershire Spool & Mfg. Co.
Lowell Shuttle Co.
Frank Mossberg Corp.
Mossberg Pressed Steel Corp.
Walter L. Parker Co.
Steel Heddle Mfg. Co.
Bebbin Saving Treatment—
The Textilac Co. Boxes— Wilts Veneer Co. Box Shooks-Wilts Veneer Co. Blowers and Blower Systems
Carries Engineering Co.
Parks-Cramer Co.
Breton Mineral Oli—
Borne, Scrysmer Co. Brushes—
Atlanta Brush Co.
Curtis & Marble Machine Co.
Brushing Machines—
Curtis & Marble Machine Co.
Bobbin Stripper—
Terrell Machine Co. Calenders—
H. W. Butterworth & Bons Co.
B. F. Perkins & Son, Itc.
Textile Finishing Machinery Co. B. S. Roy & Son Co. B. S. Roy & Son Co.

Cards—

Woonsocket Machine & Press Co., Inc.
Saco-Lowell Shops.
Whitin Machine Waxis.
Card Clothing—
Ashworth Bros.
Charlotte Mfg. Co.
Rioward Bros. Mfg. Ce.
Wickwire Spencer Steel Co.
Card Grinding Machine:y—
Easton & Burnham Machine Co.
Dronsfield Bros.
T. C. Entwistle Co.
Roy & Son Co., B. S.
Saco-Lowell Shops.
Whitin Machine Works.
Woonsocket Machine & Press Co., Inc.
Carrier Aprons— Link-Beit Co.

Wickwire - Spencer Steel Co.

Caustic Potash—

A. Klipstein & Co.

Caustic Soda—

Arnold, Hoffman & Co. Inc.

A. Klipstein & Co.

Mathleson Alkail Works, Inc.

Chain Beits and Drives—

Charles Bond Company

Link-Beit Co.

Morse Chain Co.

Chemicals—

L. Sonneborn Sons, Inc.

J. B. Ford Co.

Hart Products Corp.

A. Klipstein & Co.

Mathleson Alkail Works, Inc.

National Oil Products Co.

Seydel Chemical Co.

Coth Prosses—

Economy Baler Co.

Cioth-Winding Paper Cores—

Cores for Cloth-Winding—

Clutches (Friction)—

Charles Bond Company

Textile Finishing Machinery Co.

Wood's T. B. Sons Co.

Ciutch Spindies—

Fournier & Lemoine.

Coal Handling Machinery—

Link-Beit Co.

Combs—

Steel Heddle Mfg. Co. Link-Belt Co.
Combs—
Steel Heddle Mfg. Co.
Steel Heddle Mfg. Co.
Combs (Beamers, Warpers, Slashers)—
T. C. Entwistle Co.
Easton & Burnham Machine Co.
Commission Meronants—
Catiln & Co.
J. H. Lane & Co.
Mauney-Steel Co.
Paulson, Linkroum & Co.
Ridley, Watts & Co.
The Farish Co.
Compressors (Air)—
Allis-Chalmers. Mfg. Co.

Condensers— Allis-Chalmers Mfg. Co. Conditioning Machines

American Moistening Co. Conquit Fittings— Chicago Fuse Mfg. Co. Cones (Paper)— Cone Vice Couplings—

william Seliers & Co., Inc.

Conveying Systems—

Link-Selt Co.

Coolers (Air)—

—See Humidifying Apparatus.

Cotton—

Lesser-Goldman Cotton Co.

Sanders, Orr & Co.

Stewart Bros. Cotton Co.

S. B. Tanner, Jr.

Wm. & York Wilson.

Cotton Machinery—

Ashworth Bros.

Barber-Colman Co.

Collins Bros. Machine Co.

Crompton & Knowles Loom Works.

Dixon Lubricating Saddle Co.

Draper Corporation.

Easton & Burnham Machine Co.

T. C. Entwistle Co.

Fales & Jenks Machine Co.

H. & B. American Machine, Inc.

Hopedale Mfg. Co.

Rodney Hunt Machine Co.

National Ring Traveler Co.

Roy & Son, B. S.

Saco-Lowell Shops.

Southern Spindle & Flyer Co.

Stafford Co., The

Terrell Machine Co.

Tolhurst Machine Works.

Universal Winding Co.

Whitin Machine Works.

Whitinsville Spinning Ring Co.

Woonsocket Machine & Press Co., Inc.

Cotton Openers and Lappers—

Saco-Lowell Shops.

Whitin Machine Works.

Whitin Machine Works.

Woonsocket Machine & Press Co., Inc.

Cotton Softeners—

Arabol Mfg. Co.

Arabol Mfg. Co. Cone Vice Couplings-William Sellers & Co., Inc. Woonsocket Machine & Press
Cotton Softeners—
Arabol Mfg. Co.
Arnold, Hoffman & Co., Inc.
Bosson & Lane.
Hart Products Corp.
E. F. Houghton & Co.
A. Klipstein & Co.
National Oil Products Co.
Seydel Chemical Co.
Seydel Chemical Co.
Seydel-Woolley Co.
L. Sonneborn Sons, Inc.
Wolf, Jacques & Co.
Cotton Waste Machinary— Cotton Waste Machinery— Woonsocket Machine & Press Co., Inc. Saco-Lowell Shops. Whitin Machine Works. Counters (Revolution, Hank, Piek, etc)-The Root Co. Couplings (Shaft)—
Charles Bond Company
William Sellers & Co., Inc.
Wood's T. B. Sons Co. Cranes-Link-Belt Co. Link-Belt Co.
Debby Chain—
Crompton & Knowles Loom Works.
Rice Dobby Chain Co.
Doffing Boxes—
Rogers Fibre Co.
Doublers—
Saco-Lowell Shops.
Textile Finishing Machinery Co.
Universal Winding Co. Drawing Rolls— Metallic Drawing Roll Co. Metallic Drawing Roll Co.

Drink Fountains—
Puro Sanitary Drinking Fountain Ce.

Puro Sanitary Drinking Fountain Ce.

Drives (Silent Chain)—
Charles Bond Company
Link-Belt Co.

Morge Chain Co.

Drop Wires—
Crompton & Knowles Loom Works.

Draper Corporation.

Hopedale Mfg. Co.

Mossberg Pressed Steel Corp.
R. I. Warp Ston Equipment Co.

Dryers (Centrifugal)—
Roy & Son Co., B. S.

Tolhurst Machine Works.

Dyers— Dyers—Southern Artsilk Bleach & Dye Works, Southern Artsik Bleach & Dye Works, Inc.

Dyeing, Drying, Bleaching and Finishing Machinery—
Cocker Machinery & Foundry Co. American Laundry Machinery Co. H. W. Butterworth & Sons Co. Franklin Process Co. Klauder-Weldon Dye Machinery Co. Ferkins, B. F. & Sons, Inc. Rodney Hunt Machine Co. Textile Finishing Machinery Co. Dyestuffs and Chemicals—
Borne, Scrymser Co. Bosson & Lane.

E. I. du Pont de Nemours & Co., Inc.

General Dyestuff Corp.

A. Ampstein & Co.
Astronal on Products Co., Inc.
Astronal on Products Co., Inc.
Astronal Amme & Chemical Co.
You, Jacques & Co.

You, Jacques & Co.

See Works—
Franchin Process Co.

Serves rimining Frants, Inc.
Electric Fans—
Alin-Chaimers Mig Co.
General miectric Co.
Westinghouse Electric & Mig. Co.
Link-Beit Co.
Electric Lighting—
Alin-Chaimers Mig. Co.
General Electric Co.
Westinghouse Electric & Mig. Co.
Charles Bond Company
Fairbanks—Morse Co.
General Electric Co.
Westinghouse Electric & Mig. Co.
Electric Supplies—
Chicago Fuse Mig. Co.
Cooper-Hewitt Electric Co.
General Electric Co.
Westinghouse Electric Co.
General Electric Co.

Westinghouse Electric Co.

Westinghouse Electric & Mig. Co.
Electric Supplies—
Chicago Fuse Mig. Co.
Cooper-Hewitt Electric Co.
General Electric Co.
Westinghouse Electric & Mig. Co.
Electric Supplies—
Link-Belt Co. Link-Belt Co.

Engineers (Mill)—

See Architects and Mill Engineers. See Architects and Mill Engineer
Engineers (Ventilating)—
Bahnson Co.
Parks-Cramer Co.
Engines (Steam, Oil, Gas, Pumping)—
Allis-Chalmers Mfg. Co.
Fairbanks, Morse & Co.
Sydnor Pump & Well Co.
—See also Ventilating Apparatus. Expert Textile Mechanic
J. D. Hollingsworth.
Extractors

American Laundry Machine Co.
Tohurst Machine Works.

Fences (Iron and Wire)—
Page Fence and Wire Products Assn.
Wickwire Spencer Steel Co.
Fibre Specialties—
Rogers Fibre Co.
Finishers—
Sayles Finishing Plants, Inc.
Finishing Compounds—
Arnold, Hoffman & Co., Inc.
Borne, Scrymser o.
Hart Products Corp.
E. F. Houghton & Co.
A. Klipstein & Co.
National Oil Products Co.
Seydel-Woolley Co.
Seydel-Woolley Co.
I. Sonneborn Sons Co.
Finishing Machinery—
R. W. Butterworth & Sons Co.
B. F. Perkins & Son, Inc.
Finishing Machinery—
Finishing Machinery—
Rea Dyeing, Drying, Bleaching and Expert Textile Mechanic-H. W. Butterworth & Sons Co.
B. F. Perkins & Son, Inc.
Finishing Machinery—
—See Dyeing, Drying, Bleaching and Finishing.
Flat Wall Paint—
B. 1. du Pont de Nemours & Co., Inc.
U. S. Gutta Percha Paint Co.
Flexible Couplings—
T. B. Wood's Sons Co.
Floor Stands—
Wood's T. B. Sons Co.
Fluted Rolls—
Collins Bros. Machine Co.
Fales & Jenks Machine Co.
Woonsocket Machine & Press Co., Inc.
Whitin Machine Works.
Flyer Pressers and Overhaulers—
Southern Spindle & Flyer Co.
Whitin Machine Works.
Flyer Pressers and Overhaulers—
Southern Spindle & Flyer Co.
Whitin Machine Works.
Flyers—
Southern Spindle & Flyer Co.
Whitin Machine Works.
Flyers—
Southern Spindle & Flyer Co.
Flyers—
Second Devail Shops. Fiyers—Saco-Lowell Shops.
Southern Spindle & Flyer Co.
Whitin Machine Works. Whitin Machine Workship Steel Heddle Mig. Co. Friction Clutches— Wood's T. B. Sons Co. See Clutches.
Fuses — Chicago Fuse Mig. Co. Garnett Roll Grinders— B. S. Roy & Son Co. Gearing (Silent Flexible)— Link-Belt Co. Gear Charles Bond Company
Dan Gear Co.
Ferguson Gear Co.
Gears—Silent—
Charles Bond Company
Ferguson Gear Co.
Gear Makers—
Charles Bond Company
Ferguson Gear Co.
Generating Sets—
Fairbanks, Morse & Co.
Grate Bars—
Thomas Grate Bar Ce.
Spindle Repairers—
Collins Bros. Co.

## CLASSIFIED LIST OF ADVERTISERS

Grab Buckets-Link-Belt Co. Greasse—
N. Y. & N. J. Lubricant Co.
L. Sonneborn Sons, Inc.
Grinding and Polishina Machines—
Gudgeon Rolls—
Wasneburn Gudgeon Kons-Wasnburn.
Easton & Burnham Machine Ce.
Roy, B. S. & Son Co.
Hangers (Ball and Socket)—
Charles Bond Company
William Selers & Co., Inc.
T. B. Wood's Sons Ce. Hangers (Shaft)—
Charles Bond Company
Hyatt Holler Bearing Co.
William Sellers & Co., Inc.
Wood's T. B. & Sons Co.
Hardware Supplies—
Textule Mill Supply Co. Harness Twine-Gariand Mig. Co. Gariand Mig. Co.

Harness and Frames—
— See Heddles and Frames.

Heddles and Frames—
Gariand Mig. Co.
Steel Heddle Mig. Co.
L. S. Watson Mig. Co.
Hopper-Feed Hand Stokers—
The J. H. Williams Co.
Hosiery Dyeing Machinery—
Cocker Machinery—
Cocker Machinery—
Cocker Machinery—
Cocker Machinery—
Cocker Machinery—
American Moistening Co.
The Bahnson Co.
Cartler Empineering Co.
Farks-Cramer Co. American Moistening Co.
The Bahnson Co.
Carrier Engineering Corp.
Farks-Cramer Co. ratas-Cramer Co.

rydro-Extractors—

roihurst Machine Co.

ridige Deing Machinery—

H. W. Butterworth & Sons Co.
Cocker Machine & Foundry Co.

Textile Finishing Machinery Co. Liberty Mutual Insurance Co. Kait Goods Finishing Machines— Kaumagraph Co. Merrow Machine Co., The. Anotters—
Barber-Colman Co.
Merrow Machine Co. Knitting Lubricants—
National Oil Products Co.
Laundry Machinery—
Tolhurst Machine Works. Landscape Architect—
E. S. Draper.

Leather Packings—
Charles Bond Company
Edward R. Ladew Co.
E. F. Houghton & Co.
Graton & Knight Mfg. Co.
Leather, Loom Pickers— Graton & Knight Mfg. Co.

Leather Loom Pickers—
Charles Hond Company
E. H. Jacobs Mfg. Co.

Leather Strapping—
Charles Bond Company
Edward R. Ladew Co.
Graton & Knight Mfg. Co.
E. F. Houghton & Co.

Leather Straps—
E. H. Jacobs Mfg. Co.

Liquid Chierine—
Arnold, Hollman & Co., Inc.
Mathleson Alkali Works, Inc.
Looms— Arhold, Hoffman & Co,, Inc.
Mathleson Alkall Works, Inc.
Logns—
Crompton & Knowles Loom Works.
Drsper Corporation.
Hopedale Mfg. Co.
Stafford Co., The
Loom Beams and Heads—
Frank Mossberg Corp.
Mossberg Pressed Steel Corp.
Crompton & Knowles Loom Works.
Hopedale Mfg. Co.
Mossberg Pressed Steel Corp.
Steel Heddle Mfg. Co.
R. I. Warp Stop Equipment Co.
Loom Harness—
Atlanta Harness & Reed Mfg. Co.
Garland Mfg. Co.
Steel Heddle Mfg. Co.
Charles Bond Company
Edward R. Ladew Co.
E. H. Jacobs Mfg. Co.
Graton & Knight Mfg. Co.
Creensboro Loom Reed & Harness Co.
Steel Heddle Mfg. Co.
Com Reeds—
Atlanta Harness & Reed Mfg. Co.
Oreensboro Loom Reed & Harness Co.
Steel Heddle Mfg. Co.
Creensboro Loom Reed & Harness Co.
Steel Heddle Mfg. Co.
Creensboro Loom Reed & Harness Co.
Steel Heddle Mfg. Co.
Cocom Supplies—
Charles Bond Company
E. H. Jacobs Mfg. Co.

Lubricants—

purne, Scrymser & Co.

m. F. Houghton & Co.

N. I. & N. J. Lubricant Co.

L. Sonneborn Sons, Inc.

Lubricators—

Mascoun H. Smith Co., Inc.

Lug Mraps—

Charles Bond Company

m. H. Jacobs Mig. Co.

Macninery Ename—

E. I. du Pont de Nemours & Co., Inc.

Mangless Mangles—
H. W. Butterworth & Sons Co.
Textile Finishing Machinery Co. Textile Finishing Machinery Co.

Markers—
Raumagraph Co.
Merrow Machine Co.
Measuring and Folding Machines—
Curtis & Marbie Machine Co.
Textile Finishing Machinery Co.
Mercgrizing Machinery—
Cocker Machinery & Foundry Co.
H. W. Sutterworth & Sons Co.
Textile Finishing Machinery Co.
Metal Paint—
E. I. du Pont de Nemours & Co., Inc.
Meters— E. I. du Pont de Meters Mig. Co.
Allis-Chalmers Mig. Co.
General Electric Co.
Westunghouse Electric & Mig. Co.
Mill Architects—
— See Architects.
Mill Lighting—
— See Electric Lighting. Mill Lighting
—— See Electric Lighting.

Mail Starches—
Arnold, Huffman & Co., Inc.
Ias. H. Billington Co.
Corn Products Refining Co.
Penick & Ford, Ltd.
Keever Starch Co.
Stein, Hall & Co.
Mill Supplies—
Charles Bond Company
Dixon Lubricating Saddle Co.
E. H. Jacobs Mig. Co.
Garland Mig. Co.
Textile Mill Supply Co.
Thomas Grate Bar Co.
Mill White— Fhomas Grate Bar Co.

Mill White—
E. I. du Pont de Nemours & Co., Inc.

Monosulphol Oil—
National Oil Products Co.

Napper Clothing—
Wickwire Spencer Steel Co.

Napper Roll Grinders—
B. S. Roy & Son Co.

Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.

Oils— Westinghouse Electric & Arnold, Hoffman & Co., Inc.
E. F. Houghton & Co.
A. Klipstein & Co.
National Oil Products Co.
N. Y. & N. J. Lubricant Co.
L. Sonneborn Sons, Inc.
Wolf, Jacques & Co.
Oil Burners—
Beott-Newman Oil Burner Co.
Oils (Hyroscopic)—
National Oil Products Co.
Oils (Rayon)— National Oil Products Co.
Oils (Rayon)—
National Oil Products Co.
One-Piece Furnace Linings—
Carolina Refractories Co.
Opening Machinery—
H. & B. American Machine Co.
Saco-Lowell Shops.
Whitin Machine Works. H. & B. American Machine Co.
Saco-Lowell Shops.
Whitin Machine Works.
Overhaulers—
Saco-Lowell Sohps
Overseaming and Overedging Machines—
Southern Spindle & Flyer Co.
Paints—
Aluminum Co. of America.
Oliver Johnson & Co.
Tripod Paint Co.
U. S. Gutta Percha Paint Co.
Patents—
Paul B. Eaton
Sisgers & Siggers.
Perforated Machinery Guards—
Wickwire Spencer Steel Co.
Perforated Metals—
Wickwire Spencer Steel Co.
Picker Gears—
Cocker Machinery & Foundry Co.
Pickers (Leather)—
Charles Bond Company
Edward R. Ladew Co
E. F. Houghton & Co.
E. H. Jacobs Mfg. Co.
Garland Mfg. Co.
Graton & Knight Mfg. Co.
Picker Sticks—
Charles Bond Company
Garland Mfg. Co.
Picker Sticks—
Charles Bond Company
Garland Mfg. Co.
Picce Dyeling Machinery—
H. W. Butterworth & Sons Co.
Cocker Machinery & Foundry Co
Rodney Hunt Machine Co.
Textile Finishing Machinery—
Allis-Chalmers Mfg. Co.
Charles Bond Company
Hyatt Roller Bearing Co.
Fafnir Bearing Co.
Link-Beit Co.

Morse Chain Co.
William Sellers & Co., Inc.
Wood's, T. B. Sons Co.
Praparatory Magninery (Cotton)—
H. & B. American Machine Co.
Saco-Lowell Shops.
Whitin Machine Works.
Woonsocket Machine & Press Co., Inc. Whitin Machine Works.
Woonsocket Machine & Press Co., Inc. Woonsocket Machine & Prepinboards—
Rodney Hunt Machine Co.
Washburn.
Percelain Guides and Parts—
Rodney Hunt Machine Co.
Page-Madden Co., inc. Page-Matter Co.
Presses— Baconomy Baler Co.
Saco-Lowell Shops.

Pulleys (Cast Iron)—
Charles Bond Company
William Sellers & Co., Inc.
Wood's, T. B. Sons Co. wood's, T. B. Sons Co.
Pumps—
Blackmer Rotary Pump Co.
Pumps (Boiler Feed; also Centrifugal)—
Allis-Chalmers Mfg. Co.
Fairbanks, Morse & Co.
Sydnor Pump & Well Co.
Presses—
Collins Bros.
Guill Roards— Washburn.
Quillers—
Crompton & Knowles Loom Works.
Universal Winding Co.
Whitin Machine Works.
Quill Cleaners—
Terrell Machine Co. Receptacles—
Economy Baler Co.
Rogers Fibre Co. Rogers From Reels— Cocker Machinery & Foundry Co. H. W. Butterworth & Sons Co. Rodney Hunt Machine Co. Frank Mossberg Corp. Frank Mossberg Corp.

Rings—
Whitinsville Spinning Ring Co.
Ring Spinning Frames—
Fales & Jenks Machine Co.
H. & B. American Machine Co.
Textile Finishing Machinery Co.
Whitin Machine Works.
Saco-Lowell Shops.
Ring Travelers—
Dary Ring Traveler Co.
National Ring Traveler Co.
U. S. Ring Traveler Co.
Rolls—

Sars Co.
Rolls—

Ring Traveler Co. U. S. Ring Traveler Co.

Rolls—
H. W. Butterworth & Sons Co.
Collins Bros. Machine Co.
Fales & Jenks Machine Co.
Rodney Hunt Machine Co.
The Whitin Machine Works.
Woonsocket Machine & Press Co., Inc.
Saco-Lowell Shops.
Southern Spindle & Flyer Co.
Taxtile Finishing Machinery Co.
Rolls (Metal)—
Rodney Hunt Machine Co.
Rolls (Rubber)—
Rodney Hunt Machine Co.
Rolls (Wood)—
Rodney Hunt Machine Co.
Rolls (Wood)—
Rodney Hunt Machine Co.
Rolls (Rubber)—
Rodney Hunt Machine Co. Rodney Hunt Machine Co.
Washburn.
Roller Bearings—
Charles Bond Company
Fafnir Bearing Co.
Hyatt Roller Bearing Co.
Roving Cans and Boxes—
Denison Mfg. Co.
Roving Machinery—
Whitin Machine Works.
Woongocket Machine & Press Co., Inc.
Saco-Lowell Shops.
Saddles— Saco-Lowen Shots.
Saddles—
Dixon Lubricating Saddle Co.
Sanitary Equipment—
Vogel Co., Joseph A.
Sanitary Fountains—
—See Driaking Fountains. Sanitary Fountains——See Drinking Fountains.

Scales—Fairbanks, Morse & Co.
Scaliop Machines—
Merrow Machine Co.
Scouring Powders—
Bosson & Lane.
Ford, J. B. Co.
National Oil Products Co.
Scrubbing and Cleaning Powders—
The Denison Mfg. Co.
Sesquicarbonate of Soda—
Mathieson Alkali Works, Inc.
Section Beam Heads—
Frank Mossberg Corp.
Seiling Agents—
Woodward Raldwin & Co.
Deering Milliken & Co.
Reeves Bros.
Selling Agents (Cotton Goods)—
Amory Browne & Co.
Curran & Barry.
Deering, Milliken & Co.
W H Langley & Co.
Leslie, Evans & Co.
Reeves Bros.
Wellington, Sears & Co.

Sewing Machine—
Merrow Machine Co.
Sewing Machines and Supplies—
Curfis & Marble Machine Co.
Shafting, Hangers, Etc.
—See Power Transmission Machine; Shafting—
Fafnir Bearing Co.
William Sellers & Co., Inc.
Wood's T. B. Sons Co. Shell Stitch Machines-Merrow Machine Co. Short Center Drives-T. B. Wood's Sons Co. Short Center Drives—
T. B. Wood's Sons Co.

Shuttles—
Jas. H. Billington Co.
David Brown Co.
Lowell Shuttle Co.
Draper Corporation.
Hopedale Mfg. Co.
Shambow Shuttle Co.
L. S. Watson Mfg. Co.
The J. H. Williams Co.
U. S. Bobbin & Shuttle Co.
Silk Yarns (Artificial)—
American Cellulose & Chemical Mfg. Co
Duplan Silk Corp.
Imperial Rayon Co.
Industrial Fibre Co.
Silent Chain Drive—
Link-Belt Co.
Morse Chain Co.
Singeing Machinery—
H. W. Butterworth & Sons Co.
Textile Finishing Machinery Ce.
Sizing Starches, Gums—
Arnold Hoffman & Co. Inc. Sizing Starches, Gums— Arnold, Hoffman & Co., Inc. Arabol Mfg. Co. Hart Products Corp. Arnold, Hoffman & Co., Inc.
Arabol Mfg. Co.
Hart Products Corp.
L. Sonneborn Sons, Inc.
Stein, Hall & Co.
Sizing Compounds—
Arnold. Hoffman & Co., Inc.
Bosson & Lane
Corn Products Refining Co.
Drake Corp.
General Dyestuff Corp.
Hart Products Corp.
A. Klipstein & Co.
National Oil Products Co.
United Chemical Products Co.
John P. Marston & Co.
Seydel Chemical Co.
Seydel-Woolley Co.
L. Sonneborn Sons, Inc.
Wolf, Jacques & Co.
Slashers Combs—
Easton & Burnham Machine Co.
T. C. Entwistle Co.
Textile Finishing Machinery Co.
Softeners (Cotton,
Arabol Mfg. Cs.
Arnold, Hoffman & Co., Inc.
Bosson & Lane.
General Dyestuff Corp.
E. F. Houghton & Co.
National Oil Products Co., Inc.
Seydel Chemical Products Corp.
U. S. Bobbin & Shuttle Co.
Wolf, Jacques & Co
Softeners—
Arnold, Hoffman & Co., Inc.
Seydel Chemical Products Corp.
U. S. Bobbin & Shuttle Co.
Wolf, Jacques & Co.
National Oil Products Co., Inc.
E. F. Houghton & Co.
National Oil Products Co., Inc.
Seydel-Woolley Co.
L. Sonneborn Sons Co.
Skewers—
Daid Brown Co.
Courtney, The Dana S. Co. National Oil Froducts Co., Inc.
Seydel-Woolley Co.
L. Sonneborn Sons Co.
Skewers—
Daid Brown Co.
Courtney, The Dana S. Co.
T. C. Entwistle Co.
Jordan Mfg. Co.
Walter L. Parker Co.
U. S. Bobbin & Shuttle Co.
Slashers and Equipment—
Saco-Lowell Shops.
Soaps—
Arabol Mfg. Ce.
Arnold, Hoffman & Co., Inc.
A. Klipstein & Co.
National Oil Products Co.
L. Sonneborn Sons, Inc.
United Chemical Products Co.
Soda Aah—
J. B. Ford Co.
Mathleson Alkall Works, Inc.
Softeners (Oil)—
Bosson & Lane.
E. F. Houghton & Co.
Hart Products Corp.
National Oil Products Co.
L. Sonneborn Sons, Inc.
Spindies—
Collins Bros. Machine Co.
Draper Corporation.
Easton & Burnham Machine Co.
Fales & Jenks Machine Co.
Fales & Jenks Machine Co.
Fales & Jenks Machine Co.
Saco-Lowell Shopa.
Whitin Machine Works.
Southern Spindie & Flyer Co.
Woonsocket Machine & Press Co., Inc.

## CLASSIFIED LIST OF ADVERTISERS

Fournier & Lemoine.
Fales & Jenks Machine Co.
Southern Spindle & Flyer Co.
Spinning Frame Saddles—
Dixon Lubricating Saddle Co.
Spinning Frame Top Rolls (Wood)—
Washburn.
Spinning Rings—
Collins Bros. Machine Co.
Draper Corporation.
Fales & Jenks Machine Co.
Pawtucket Spinning Hing Co.
Saco-Lowell Shops.
Whitin Machine Works.
Whitinsville Spinning Ring Co.
Spools— Whitinsville Spinning Ring Co.
Spools—
David Brown Co.
Courtney, The Dana S. Co.
Jordan Mig. Co.
Lestershire Spool & Mig. Co.
Frank Mossberg Corp.
Steel Heddle Mig. Co.
U. S. Bobbin & Shuttle Co.
Walter L. Parker Co.
Sprockets—
Cocker Machinery & Foundry Co.
Sprockets, Stient Chain—

Lank-Belt Co.

Draper Corporation.

Baston & Burnham Machine Co.
Saco-Lowell Shops.

Whitin Machine Works. Whith Machine Works.

Spinning Tapes—
American Textile Banding Co.
Barber Mfg. Co.
Georgia Webbing & Tape Co.

Squeeze Rolls—
H. W. Butterworth & Sons Co.
Cocker Machine & Foundry Co.
Rodney Hunt Machine Co.
Textile Finishing Machinery Co.

Starch—
Arnold, Hoffman & Co., Inc.
Corn Products Refining Co.
Keever Starch Co.
Penick & Ford, Ltd.
Stein, Hall & Co.
Stencil Machines—
A. J. Bradley Mfg. Co.
Stencil Papers—
A. J. Bradley Mfg. Co.
Stripper, Carde-A. 4. Bradley and Co.
Stripper Cards—
L. S. Watson Mfg. Co.
Wickwire Spencer Steel Co.
Switch Boxes—
Chicago Fuse Mfg. Co.

Tanks—
H. W. Butterworth & Sons Co.
Rodney Hunt Machine Co.
Textile Finishing Machinery Co.

Textile Finishing Machinery Co.

Tape—
Georgia Webbing & Tape Co.

Temperature Regulators—
American Schaeffer & Budenberg Corp.

Textile Castings—
H. W. Butterworth & Sons Co.
Cocker Machinery & Foundry Co.
Textile Machinery Specialties—
H. W. Butterworth & Sons Co.
Cocker Machine & Foundry Co.
Rodney Hunt Machine Co.
Hyatt Roller Bearing Co.
Textile Finishing Machinery Co.
Textile Soda—
J. B. Ford Co.
Mathieson Alkali Co.
Temples—

Mathleson Alkan Co.
Temples—
Draper Corporation.
Hopedale Mfg. Co.
Textile Apparatus (Fabrics)—
B. F. Perkins & Son, Inc.
Henry L. Scott & Co.
Textile Dryers—
American Moistening Co.

Top Beams—
Frank Mussberg Corp.

Top none for Spinning Frames—
Westbound
Trademarking Machines—
Cuttle & Alathie Machine Co.

Transfer Stamps—
Addingraph Co. Adumagraph Co.

winam Seifers & Co., Inc.
woods T. B. & Sons Co.
loisets—
vogel, Jos. A. Co.
loisets—
vogel, Jos. A. Co.
landses Chain—
Link-Beit Co.
Morse Chain Co.
loisets—
togers Fibre Co.
W. T. Lane & Bros.
loisets—
washburn.
lubes (Paper)—
Sonoco Products Co.
lurbines (Steam)—
Allis-Chaimers Mfg. Co.
lwisting Machinery—
Collins Bros. Machine Co.
Draper Corporation.
Fales & Jenks Machine Co.
Saco-Lowell Shops.
Whitin Machine Works.
Twisting Tapes—

Writin Machine Works.
Twisting Tapes—
Barber Mfg. Co.
Underwear Machines—
Merrow Machine Co.
Ventilating Apparatus—
American Moistening Co.
Parks-Cramer Co.
Ventilating Fans—
B. F. Perkins & Son., Inc.

Barber-Colman Co.
Cocker Machinery & Foundry Co.
Crompton & Knowles Loom Works.
Draper Corporation.
Easton & Burnham Machine Co.
Saco-Lowell Shops.
T. C. Entwistle Co.

T. C. Entwistle Co.
Warp Dressing—
Arnold, Hoffman & Co., Inc.
Boson & Lane.
Draper Corporation.
Hart Products Corp.
E. F. Houghton & Co.
National Oil Products Co.
Seydel-Woolley Co.
L. Sonneborn Sons Co.
Warp Stop Motion—
Draper Corp.
Hopedale Mfg. Co.
R. I. Warp Stop Equipment Co.
Warp Tying Machiana

Warp Tying Machinery—
Barber-Colman Co.
Warper Shell—
Cocker Machinery & Foundry Co.
Washers (Fibre)—
Rogers Fibre Co
Waste Reclaiming Machinery—
Saco-Lowell Shops
Whitin Machine Works
Woonsocket Machine & Press Co. Inc

Woonsocket Machine & Pres Waste Presses— Economy Baler Co. Water Controlling Apparatus— Rodney Hunt Machine Co.

Water Wheels— Allis-Chaimers Mfg. Co. Allis-Chaimers Mrg. Co.
Weighting Compounds—
Arabol Mrg. Co.
Bosson & Lane.
General Dyestuff Corp.
Hart Products Corp.
Marston, Jno. P.
National Oil Products Co.
Jacques Wolf & Co.
Seydel-Woolley Co.
L. Sonneborn Sons, Inc.

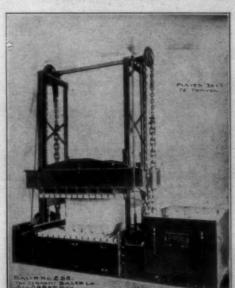
Well Drillers—
Sydnor Pump and Well Co. Whizzers—
Tolhurst Machine Works.
Winders—
Easton & Burnham Machine Co.
Saco-Lowell Shops.
Universal Winding Co.

Windows— Carrier Engineering Corp. Parks-Cramer Co. Window Guards— Wickwire Spencer Steel Co. Wire Partitions— Wire Partitions—
Wrenches—
Frank Mossberg Corp.
Wickwire Spencer Steel Co.
Yardage Clocks—
T. C. Entwistle Co.
Yarns—
Paulson, Linkroum & Co.
Mauney-Steel Co.
Yarn Tension Device—
Ecipse Textile Devices, Inc.
Yarn Presses—
Economy Baler Co.
Yarn Testing Machines—
H. L. Scott & Co.



## CLOTH PRESS

HEAVY DUTY NO. 258. PLATEN 50 x 36



This Economy Heavy Duty Cloth Press No. 258, has a platen 50 x 36 inches. Platen travel of 72 inches. E quipped complete with Direct Connected Electric Motor.

Press will develop tremendous pressure, ample for the baling for Export and Domestic shipment of Duck, Khaki, Osnaburgs, Sheeting, Print Cloths, Ticking, Twills, Denims, Drills, Lawns and Shirtings or for compressing ginghams. Requires only about one minute of actual motor operation to make a Bale of Cloth. Press maintains its

make a Bale of Cloth.

Press maintains its maximum pressure indefinitely, until released. Unlimited compressing platen stroke. In other words, platen will travel as low as is necessary to completely compress the bale, regardless of the third dimension, as the platen can go down to within four inches of compressing platform. Entirely self contained, requiring no cement foundation, pit. C.

over head counter-shafting, chain connections, etc.

Chains are hand forged Swedish steel. Will stand over 50 per cent
over load, a greater load than can be exerted by the motor pulling up to
40 H. P. torque.

Write for any special information

ECONOMY BALER COMPANY

Ann Arbor, Mich.

## Ashworth Brothers, Inc. Tempered and Side Ground Card Clothing

TOPS RECLOTHED

LICKERINS REWOUND

COTTON MILL MACHINERY REPAIRED

For Prompt Service send your Top Flats to be reclothed and your Lickerins to be rewound to our nearest factory. We use our own special point hardened lickerin wire

Graham and Palmer Sts., Charlotte, N. C.

44-A Norwood Place, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.



Specify
"UCP" on your
Requisitions

These Products are the Reliable Standards of Uniformity Demanded by the Leading Textile Mills

## **Dyestuffs Softeners**

Sizes

Oils

Chemicals

## United Chemical Products Corporation

Importers, Exporters and Manufacturers

York & Colgate Sts.

Southern Office 307 Commercial National Bank Building Charlotte, N. C. Pawtucket, R. I.

Norwalk, Conn.

Chicago, Ill.



#### LANE

Patent Steel Frame Canvas Mill Baskets

Have for many years served America's Textile Industry throughout its wide and diversified Field.

It is the Hard Job that brings out their real worth.

## W. T. Lane & Brothers

Originators and Manufacturers of Canvas Baskets for 25 years

Poughkeepsie, N. Y.





## MORSE

Textile Chain Drives
MORSE CHAIN CO., ITHACA, N. Y., U. S. A.

#### There is a Morse Engineer near you

ATLANTA, GA., 702 Candler Bidg.,
Earl F. Scott & Co.; BALTIMORE,
MD., 1402 Lexington Bidg.; BIRMINGHAM, ALA., Moore-Handley Hdwe.
Co.; BOSTON, MASS., 141 Milk St.;
CHARLOTTE, N. C., 404 Commercial
Bank Bidg.; CHICAGO, ILL., 112 W.
Adams St.; CLEVELAND, OHIO, 421
Engineers Bidg.; DENVER, COLO.,
211 Ideal Bidg.; DETROIT, MICH.,
7601 Central Ave.; LOUISVILLE, KY.,
516 W. Main St., E. D. Morton Co.;
MINNEAPOLIS, MINN., 413 Third St.,
Strong-Scott Mfg. Co.; NEW OR-

LEANS, LA., 521 Baronne St., A. M. Lockett Co.; NEW YORK, N. T., 50 Church St.; OMAHA, NEB., 727 W. O. W. Bldg., D. H. Braymer Equipment Co.; PHILADELPHIA, PA., 801 Peoples Bank Bldg.; PITTSBURGH, PA., Westinghouse Bldg.; SAN FRANCIB-CO., CALIF., Monadnock Bldg.; ST. LOUIS, MO., 2137 Railway Exchange Bldg.; TORONTO, 2, ONT., Canada, 50 Front St., E., Strong-Scott Mfg. Co.; WINNIPEG, MANITOBA, Canada, Dufferin St., Strong-Scott Mfg. Co.



#### MORE

## SOUTHERN SPINNERS

are using

## "AMTEX"

## Spinning, Twisting and Spooler Tapes

Than ever before

This increasing demand indicates the superiority of AMTEX Tapes over all others.

We are pleased to build special Tapes for your particular needs.

Send us your specifications and we will guarantee satisfaction.

Manufactured by

#### AMERICAN TEXTILE BANDING CO., INC.

GERMANTOWN, PHILADELPHIA, PA.

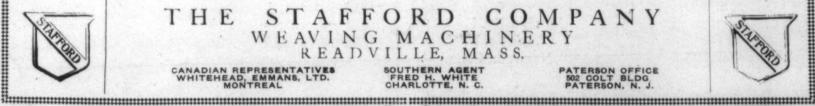
Sold in the South by

Charlotte Supply Co., Charlotte, N. C.

## FOR WIDE SHEETINGS

The Stafford broad loom is built to withstand severe service. Its simplicity, accessibllity of parts, and ease of operation are a few reasons why it is used by some of the most representative wide goods mills.

This loom embodies the high weaving qualities that characterize other Stafford looms, and can now be supplied with either shuttle or bobbin changing automatic features



#### STAFFORD COMPANY THE WEAVING MACHINERY

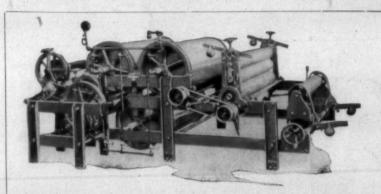
READVILLE, MASS.

MATERSON OFFICE 502 COLT BLDG PATERSON, N. J.



## RAYON MACHINERY

Complete Equipment For Manufacturing, Processing and Finishing



#### ARTIFICIAL SILK WARP SIZING MACHINE

Used by leading Manufacturers and recommended by Manufacturers of Artificial Silk.

Manufactured by

#### CHAS. B. JOHNSON

Manufacturers of Artificial Silk Slashing and Sizing Machinery

Paterson, N. J.

Winders, Quillers, Raschel Warpers and other Silk Machinery

Manufactured by

#### THE SIPP MACHINE COMPANY, Paterson, N. J.

Also a Complete Line of Dyeing, Drying, Tentering and Finishing Machinery

Correspondence Solicited from Firms or Individuals interested in the Establishment of Plants for Manufacturing Rayon

## G. G. SLAUGHTER

1016 Johnston Building

Southern Agent

Charlotte, N. C.